O D P

AUTOMATED DATA PROCESSING SYSTEMS

HEARING

BEFORE THE

SUBCOMMITTEE ON SOCIAL SECURITY

AND

SUBCOMMITTEE ON OVERSIGHT

OF THE

COMMITTEE ON WAYS AND MEANS

HOUSE OF REPRESENTATIVES

NINETY-SEVENTH CONGRESS

FIRST SESSION

MAY 22, 1981

Serial 97–16

Printed for the use of the Committee on Ways and Means

COMMITTEE ON WAYS AND MEANS

DAN ROSTENKOWSKI, Illinois, *Chairman*

SAM M. GIBBONS, Florida
J. J. PICKLE, Texas
CHARLES B. RANGEL, New York
WILLIAM R. COTTER, Connecticut
FORTNEY H. (PETE) STARK, California
JAMES R. JONES, Oklahoma
ANDY JACOBS, JR., Indiana
HAROLD FORD, Tennessee
KEN HOLLAND, South Carolina
WILLIAM M. BRODHEAD, Michigan
ED JENKINS, Georgia
RICHARD A. GEPHARDT, Missouri
THOMAS J. DOWNEY, New York
CECIL (CEC) HEFTEL, Hawaii
WYCHE FOWLER, JR., Georgia
FRANK J. GUARINI, New Jersey
JAMES M. SHANNON, Massachusetts
MARTY RUSSO, Illinois
DON J. PEASE, Ohio
KENT HANCE, Texas
ROBERT T. MATSUI, California
DON BAILEY, Pennsylvania

BARBER B. CONABLE, JR., New York
JOHN J. DUNCAN, Tennessee
BILL ARCHER, Texas
GUY VANDER JAGT, Michigan
PHILIP M. CRANE, Illinois
BILL FRENZEL, Minnesota
JAMES G. MARTIN, North Carolina
L. A. (SKIP) BAFALIS, Florida
RICHARD T. SCHULZE, Pennsylvania
BILL GRADISON, Ohio
JOHN H. ROUSSELOT, California
W. HENSON MOORE, Louisiana

JOHN J. SALMON, *Chief Counsel*
JOSEPH K. DOWLEY, *Assistant Chief Counsel*
ROBERT J. LEONARD, *Chief Tax Counsel*
A. L. SINGLETON, *Minority Chief of Staff*

SUBCOMMITTEE ON SOCIAL SECURITY

J. J. PICKLE, Texas, *Chairman*

ANDY JACOBS, JR., Indiana
WILLIAM R. COTTER, Connecticut
RICHARD A. GEPHARDT, Missouri
FRANK J. GUARINI, New Jersey
JAMES M. SHANNON, Massachusetts
DON BAILEY, Pennsylvania

BILL ARCHER, Texas
BILL GRADISON, Ohio
JOHN H. ROUSSELOT, California
PHILIP M. CRANE, Illinois

SUBCOMMITTEE ON OVERSIGHT

CHARLES B. RANGEL, New York, *Chairman*

SAM M. GIBBONS, Florida
J. J. PICKLE, Texas
HAROLD FORD, Tennessee
CECIL (CEC) HEFTEL, Hawaii
WILLIAM M. BRODHEAD, Michigan
WYCHE FOWLER, JR., Georgia

PHILIP M. CRANE, Illinois
W. HENSON MOORE, Louisiana
JOHN J. DUNCAN, Tennessee
JAMES G. MARTIN, North Carolina

(II)

CONTENTS

(III)

AUTOMATED DATA PROCESSING SYSTEMS

FRIDAY, MAY 22, 1981

HOUSE OF REPRESENTATIVES,
COMMITTEE ON WAYS AND MEANS,
SUBCOMMITTEE ON SOCIAL SECURITY,
SUBCOMMITTEE ON OVERSIGHT,
Washington, D.C.

The subcommittees met at 10:10 a.m., pursuant to notice, in room 1100, Longworth House Office Building, Hon. Charles B. Rangel (chairman of the Subcommittee on Oversight) presiding.

[Press release announcing the hearing follows:]

[Press release of May 7, 1981]

THE HONORABLE J. J. PICKLE AND THE HONORABLE CHARLES B. RANGEL, CHAIRMEN OF THE WAYS AND MEANS SUBCOMMITTEES ON SOCIAL SECURITY AND OVERSIGHT, RESPECTIVELY, ANNOUNCE JOINT HEARINGS ON AUTOMATED DATA PROCESSING (ADP) SYSTEMS, ON FRIDAY, MAY 22, 1981

Honorable J. J. Pickle, (D-Texas), Chairman of the Subcommittee on Social Security, and Honorable Charles B. Rangel, (D-N.Y.), Chairman of the Subcommittee on Oversight, Committee on Ways and Means, announced today that their subcommittees would hold a joint hearing on the apparent crisis which has been developing in the Social Security Administration's ADP systems capability. This matter has been of concern to the Social Security Subcommittee for a number of years and the former Commissioners of Social Security who recently testified on the Reagan Budget proposal all pointed to this problem as one of the most difficult facing the Social Security Administration.

A one-day hearing will be held on May 22, 1981, beginning at 10:00 a.m. in the main Ways and Means Committee Room, 1100 Longworth House Office Building. Administration witnesses will be called to explain to the Social Security and Oversight Subcommittees the scope and depth of the systems crisis. Later in the year, other witnesses will be called with expertise in the social security systems area, including the General Accounting Office. Public witnesses who wish to testify will be afforded an opportunity to appear at that time.

Chairman RANGEL. The subcommittees will come to order.

Jake Pickle, the chairman of the Social Security Subcommittee, will not be with us today but we certainly have members from both subcommittees.

The purpose of our joint hearing today is to begin identifying some of the critical problems that are facing the Social Security Administration in the management of its ADP system.

It has been reported that it is in a state of crisis and that we may experience a more serious problem in the future unless we take a look at the problem that we face today.

I want to emphasize that we are not here to place blame because certainly the problem has gone on for a number of years, and we hope that the administration can be candid with us so that those of us who have to go into the field and deal with those people that may be inconvenienced and suffer great hardship as a result of a

(1)

breakdown in the machinery that we start off with a new relationship with the committee that is seriously concerned about correcting the problem.

If we get defensive about it then we will have no way of knowing what we can do, whether we have jurisdiction or not, in correcting it. Of course, if we don't hear the facts as they exist, then we will be looking for somebody to blame and that could very well be you.

We want to avoid that.

Mr. Archer, do you have any comments to make? You are more familiar with this probably than I am.

Mr. ARCHER. I just think that these hearings are well taken. I think it is time to get out before the public the problems that this administration has inherited and hopefully come to some solutions. We welcome you before the committee.

Chairman RANGEL. You mean inherited from the Nixon administration?

Mr. ARCHER. From a long way back.

Mr. JACOBS. I wanted to make the same point, Mr. Chairman, that the previous administration was the same good fortune of inheritance.

Chairman RANGEL. Now that we have taken care of the blame—and certainly none of it has fallen on you—maybe you can tell us where we should go from there.

We welcome you, Mr. Commissioner Svahn, and hope that we will have a good working relationship. You have a statement, I assume.

STATEMENT OF HON. JOHN A. SVAHN, COMMISSIONER OF SOCIAL SECURITY, ACCOMPANIED BY FRED SCHUTZMAN, ASSOCIATE COMMISSIONER, OFFICE OF ASSESSMENTS; JOHN R. WICKLEIN, ACTING ASSOCIATE COMMISSIONER, OFFICE OF SYSTEMS; AND RENNY DiPENTIMA, DIRECTOR OF ASSISTANCE PAYMENTS

Mr. SVAHN. Yes, I do.

Chairman RANGEL. You may read it or have it placed in the record now and proceed as you would find it convenient. We will question you afterward.

Mr. SVAHN. I would like to place my statement in the record, Mr. Chairman. It is fairly lengthy but I would also like to make some remarks prior to that, if I may.

Chairman RANGEL. Without objection.

Mr. Gradison, did you have some remarks to make on this subject?

Mr. GRADISON. No, thank you, Mr. Chairman.

Mr. SVAHN. First, I would like to introduce the gentlemen at the table with me. On my left is Mr. Fred Schutzman, Associate Commissioner for Assessment; on my immediate right, Mr. Renny DiPentima, Director of Assistance Payments, Office of Legislative and Regulatory Policy and to the right of him, Mr. Jack Wicklein, Acting Associate Commissioner for Systems.

I appreciate the delay in assessing blame for the situation that we find ourselves in right now, Mr. Chairman. Having just become the Commissioner, one of the things that I immediately wanted to

look into were the allegations that had been flying around regarding the state of Social Security's ADP capacity.

I have reviewed the headquarters operation and have been out to the field. I met yesterday with 300 district office managers and met with about 900 staff in the Program Service Center in Chicago.

I can only describe the situation that we find as a textbook example of Murphy's law. The system that we have in Social Security right now is in a very, very poor state. We have tremendous backlogs. We have antiquated hardware and software. We have a paper-oriented system that relies on hard copy paper to process the largest program in the United States. We do our job by brute force rather than by technology.

I think there are three major problems.

The first one deals with the software. The software we have in Social Security is old. It has been patched, repatched, and added onto. It is inefficient. It requires a much greater hardware capacity to move it in order to make deadlines. It is virtually undocumented. In the systems jargon that means no one can figure out how it works.

Our maintenance capacity for the software is low—we average about 22,000 lines of code per maintenance program, and a reasonable industry standard is 60,000 lines.

It takes programers approximately 2 years, once they are hired, to get up to speed to be able to work with SSA's complex and antiquated software.

SSA's software is old and in different languages. Because it is not state-of-the-art, we have a tremendous problem in hiring programers and in retaining them rather than having them go to private industry or other Federal agencies.

Chairman RANGEL. What does old mean, 10 years; 15 years?

Mr. SVAHN. SSA's software was started in the early sixties and it has been added onto since then. As new programs come along we add on a new piece of software.

The second area that we have which causes us great problems is the area of storage, the storage of data and the storage of information that is needed to process claims.

The system at Social Security is tape-oriented. Our tape library contains approximately one-half million reels of magnetic tape. The tape orientation of the system makes it extremely labor intensive. We handle thousands of tapes a day and that means we have to have people to maintain the tape library, we have to have people to move the tapes back and forth and we have to have people hang them on the tape drives.

Tape orientation causes security problems. We are subject to sabotage in the tape library. We lose tapes when we move them from place to place, and those tapes are the data storage for Social Security beneficiary data.

Most importantly, I think, in terms of the tape orientation of the system, is that tapes do not allow you to take advantage of modern technology in computers.

The last area in which we have a problem—not last because of its priority, but last of the three—is the hardware. Social Security has one of the largest collections of antiques in existence.

In our program service centers we have case control systems that use equipment that has been there for 15 years—card readers and printers. In our computer center in Baltimore, we have 18 mainframe computers. None of those is current and we use two of them for spare parts in order to maintain the equipment that we have running.

The hardware causes us problems in terms of capacity and it builds backlogs. At the present time we are building 2,000 to 3,000 hours of computer time backlog a month. Our total backlog could be as high as 18,000 hours of run time.

There are about 720 working hours in a month and we have up to an 18,000-hour backlog.

I guess what I find at Social Security is what I can only characterize as a rather bizarre situation. I don't know how we could have allowed the systems capability of the Nation's largest operational program to suffer so much from neglect.

You mentioned that you hoped that the Administration would tell you the straight story and I think we are. I think that in the past the problems of the Social Security Administration systems capacity have been swept under the rug.

I read the testimony of four former Commissioners, all testifying that the systems problem was the greatest problem administratively that faced Social Security at present.

I also noted in the committee print that Chairman Pickle commented that during the time those four Commissioners were in office, none of them came up saying they had an emergency. I think we have swept this problem under the rug.

I think it is time for us to stand up and face it. I do not have the ultimate solution at the present time but I think we have to find it and I welcome the subcommittees' interest and would be pleased to work with you in the coming years to resolve the systems crisis that exists at Social Security.

That is the end of my remarks. I would be pleased to answer any questions.

[The prepared statement follows:]

STATEMENT OF JOHN A. SVAHN, COMMISSIONER OF SOCIAL SECURITY

Mr. Chairmen, I welcome this opportunity to appear before your committees today to discuss the systems operations of the Social Security Administration (SSA). In my prepared statement I will briefly review the evolution of SSA's computer systems, describe the current situation as I find it upon assuming the office of Commissioner, and discuss my approach for dealing with problems we face in this area.

As you know, the data processing operation at SSA is one of the largest in the world. Records are maintained on over 200 million Americans and monthly benefits are paid to over 36 million people. This system began as a paper operation over 40 years ago. In the late 1950's and early 1960's, SSA's operations evolved into a complex system of sophisticated machines and complicated computer programs supported by highly trained professional and technical staff. During those early days of computer technology, SSA operations stood as a model of efficiency. Over the past 10 to 15 years, because of new program demands placed on the organization, SSA has not been able to keep up with rapidly advancing technology. Today we face a crisis in systems operations.

EVOLUTION OF SSA'S COMPUTER PROGRAMS—SOFTWARE

I think it is important to understand how the current situation developed. With the advent of computers, SSA has sought to automate promptly, and to the maximum extent possible, the legal and administrative processes required to administer

5

the programs. As a consequence of this approach, the legal complexities of social security legislation are built into the data processing systems. Hundreds of different computational formulas, benefit categories, eligibility requirements, appeal procedures, and the like are incorporated into computer programs. As a result, the agency has had to rely on the operation of its data processing programs to accomplish its missions, and to successfully implement most legislative changes. Without this automated capability, overwhelming manual resources would be required. This is what we face today.

Because SSA's direct Federal operations pay benefits to more than 1 in 7 Americans and comprise almost 23 percent of the Federal budget, they are subject to constant review and amendment by Congress. In order to quickly automate major legislative changes, they have typically been absorbed into existing administrative processes and computer systems as modifications rather than through the more time consuming, but more desirable, process of designing entirely new systems.

This approach of modifying programs only to the extent necessary to implement a given change has allowed the agency to implement major changes rapidly and to process, in an automated fashion, the greater part of its massive workloads. However, it has also resulted in enormously complex, patchwork systems encompassing decades of different programming techniques. For example, although portions of the SSA claims process have been redesigned, much of this system remains as it was originally designed in the early 1960's. Similarly, SSA's system for issuing Social Security numbers was developed in the late 1950's. While many changes have been added to that system over the years, it has not been redesigned to take advantage of advances in computer machine technology and programming, or "software" techniques. In effect, the software that exists today is largely a product of continuous additions and over time has become unwieldy and inefficient.

Another factor has been the approach to conversion or modification of software to operate on new generations of computer equipment. SSA has undergone four major equipment conversions since the late 1950's; none have been accompanied by a software redesign to take full advantage of the new hardware. Rather, the revision of SSA's software to permit it to be used on new machines has been little more than a line for line recoding of the original computer program. This approach to conversion has served to retain archaic programming techniques despite three decades of technological advances.

Further complicating the software problem, SSA data processing operations rely on relatively few, very large and extremely complex files of records. The Master Beneficiary Record for Social Security recipients has over 35 million active records that interact with hundreds of computer programs comprising one software system. There are 76 software systems of varying size that comprise SSA's basic operations. These 76 software systems consist of more than 1,200 computer programs in all. This makes even a seemingly simple operation like effectuating the scheduled cost-of-living increase a task an enormous complexity. The increase for this year required changes to nearly 600 computer programs, has taken 20,000 hours of programmer effort and will require 2,500 hours of computer processing time.

The situation with SSA's software is made even more difficult because none of the computer programs for SSA's basic operations are fully documented.

The lack of adequate documentation hampers systems personnel attempting to understand and modify software with which they were previously unfamiliar. Beginning today it would take SSA 3 or 4 years to completely document existing software let alone develop new software.

The cost to SSA of operating in the environment just described is threefold. First, there is a direct cost in additional computer time because the software is inefficient and precludes efficient use of hardware. Thus, the Agency requires more hardware capacity than it would otherwise need to support its operations.

Second, the software is expensive to maintain. In the data processing industry, 60,000 lines of computer program instruction assigned to a programmer for maintenance is considered to be a good productivity level. The number of lines of code per programmer at SSA averages only 22,000. Based on the industry figures and the SSA experience, a redesign of SSA systems could result in a significant increase in programmer productivity. In effect, SSA's archaic software combined with our hardware problems, which I will discuss in a moment, require the Agency to employ more programmers than it would otherwise need to maintain its software.

The third cost of undocumented, complex software is that in order to change the computer program successfully, an in-depth knowledge of that program is necessary. But in SSA, sufficient knowledge to make changes in any one computer program or software system is usually confined to very few people. Acordingly, any loss of experienced systems personnel reduces our programming capacity to an inordinate degree.

Moreover, when major changes are required in a particular area, it is impossible to reassign personnel to maximize resources in that area. In effect, SSA's undocumented, patchwork software is not only inefficient to operate and maintain, it is inefficient to modify.

HARDWARE

Software is by no means the sole cause of SSA's systems problems. SSA's computers and support equipment are outmoded and inefficient. Our 16 "large scale" computers are no longer manufactured. Seven of them are controlled by an obsolete operating system, the computer program that enables the computer itself to process work. The way the computers must be linked to process SSA's workload results in a loss of 30 percent of their power. Moreover, only one set of the computers is large enough to handle some major claims and post-entitlement processes such as the processing of work notices, annual reports of earnings and benefit recomputations. That same set is also needed to support development and testing of new software. As a result, at present SSA is seriously short of computer capacity and meets work production schedules about half of the time. Some important work is not scheduled at all and results in production backlogs.

A few modern computers could replace the entire complement of computers devoted to SSA operations, would require less staff and time to operate, and would provide the necessary additional computer capacity to process current workloads.

To date, the problems with obtaining new, modern computers has been two-fold:

First, until now, the necessary planning has not been done which would allow the procurement of new hardware. Any procurement must follow regulations that require "maximum practicable competition." This, under the best of circumstances, is a lengthy process of justification, consultation, concurrence and approval. We now face the problem of having to initiate this process while at the same time dealing with our short-term, immediate demands for additional computer capacity.

Second, if the hardware ultimately procured under this process is not compatible with our current computer hardware, a massive software conversion effort will be required to make the transition from the old machines to the new ones. Studies indicate that it would require 225 workyears and $15 million to convert telecommunications software on two of our large computers. Total costs for conversion on all 16 computers would be significantly higher. Futhermore, to undertake this effort would require additional computer capacity to test the changes and convert the enormous SSA data files.

In addition the way SSA's information is stored presents problems. Most of it is stored on 500,000 reels of magnetic tape. Each represents an opportunity for human error since a tape must be moved and physically handled each time it is used. SSA performs over 30,000 production operations each month which require a total of 150,000 tapes to be moved and handled numerous times. Moreover, about 30 percent of SSA's tapes can not be automatically checked by the computer to assure they are the proper ones for the jobs being done.

As a result of these tape problems, computer operations are often stopped prematurely because wrong tapes are used. These operations must then be restarted resulting in loss of scarce computer time. Problems such as these might have been avoided if planning had been accomplished in the past to obtain modern, mass storage devices which eliminate the need for moving and handling tapes. We are now faced with the need to do that, at a time when day-to-day requirements are already making overwhelming demands on our resources.

Similarly, SSA's failure to take major advantages of the help data base management systems can provide in managing large amounts of information, has resulted in our systems being increasingly encumbered by having to store redundant data required by different but related computer operations.

It is also important to note that SSA's computers are used to process the data processing workloads of the Health Care Finance Administration. While that agency has its own programming staff that develops the necessary computer programs, all those programs are operated on SSA's computer equipment, including premium billings and deductions, new enrollments, inquiries from intermediaries and carries, and mailing of notices and Medicare cards. In fact, the vast majority of Health Insurance data is transmitted over SSA's telecommunication systems. These workloads, of course, represent further demands on our systems resources.

PERSONNEL

Compounding SSA's hardware and software problems has been the loss of experienced programming personnel. Over the past year we have lost approximately 20 percent of our programming staff, over 100 people. Private industry has attracted

many of these people. Due to government-wide hiring restrictions, only a few of them have been replaced. While training classes are now underway to fill critical programmer vacancies, these classes are composed of employees from within the agency. Our ability to recruit recent college graduates is hampered by the fact that salaries in the private sector are competitive and employer have access to the most advanced equipment.

In addition to the programmer shortage, we have a severe shortage of systems analysts. These are the people necessary to perform equipment analyses, feasibility studies, ADP economic analysis, and the like. Moreover, these individuals are the ones needed to write procurement requirements and monitor the resulting contracts.

In recognition of this personnel shortage in systems staff, the Administration has approved an increase in full-time permanent staffing from a level of about 1,900 as of May 1, 1981 to a level of 2,600 by September 30, 1982. This increase will provide the flexibility to recruit critically needed personnel such as experienced programmers, systems analysts, hardware and procurement specialists, and computer scientists. The time required to have these individuals trained and fully productive varies based on their background and the complexity of the area to which they are assigned. For example, even experienced programmers cannot make significant contributions to an undocumented, patchwork system without first gaining extensive experience with the system. In SSA, it can take up to 18 months before an individual is trained and productive in these areas.

<div align="center">NEW INITIATIVES</div>

While the additional staffing will certainly lessen the personnel shortage, problems involving software and hardware are not as easily resolved. However, SSA has already initiated some actions to improve these situations:

A more disciplined structured documentation of computer software has begun;

The enhancement of the nationwide telecommunications network is underway;

The purchase of more computer memory capacity is in process. This will provide greater flexibility in scheduling production work and more time for testing and validating new software;

Innovative but acceptable ways of further augmenting computer capacity to process current as well as future workloads are being explored;

Recruitment of critically needed systems personnel is underway; and

The move to the new computer center has begun, which will provide a more reliable and professional work environment and improve the morale of systems personnel as well as providing greater security.

I recognize that these are short-term measures. I intend to monitor them closely to assure that they are successfully implemented and will also take the opportunity to identify and initiate other such measures when appropriate. For example, I intend to examine closely some additional systems improvements which capitalize on some of the potential efficiencies I cited early. Specifically:

In order to insure sufficient computer capacity to process SSA's growing data processing workload, I intend to assess the advantages and disadvantages of rapidly replacing all our current computers with only a few larger and more modern computers, and

I also intend to assess the advantages of shifting away from the storage of SSA's data on magnetic tapes to the more efficient storage of data and disks or mass storage devices.

But I also recognize that the solution to the systems problem is a long-term one and involves improving both hardware capacity and software design. I consider this to be one of the most serious problems confronting Social Security and action in this area is one of my major and immediate priorities.

In developing a longer-term solution, I plan to review all the options available to deal with each element of the SSA systems problem. My plan includes:

First, a reassessment of SSA's current procurement strategy, to either affirm it or modify it where necessary. My primary concern will be to adopt a strategy that: focuses upon cost-.effective solutions to SSA's system needs for the remainder of this century; takes maximum advantage of the experience and technology that the information systems industry has to offer; permits adequate time for the redesign of SSA's software, allowing an orderly transition to a more efficient software and hardware design; and encourage competition in the development, implementation and operation of SSA's information systems.

Second, my plan includes an identification of the resources required to maintain SSA's current system as well as those needed to redesign it, and to reach a specific decision as to how much resources will be committed to each; and

Third, a reexamination of SSA's total planning process, to either reaffirm it or modify it where necessary. Systems planning is only one aspect of SSA's overall planning needs. We must have a mechanism that permits integrated planning of SSA's budget, field operations, and manual processes as well as its systems.

I see before me the duel task of assuring that SSA has the systems capability to implement new legislation, and at the same time, beginning the slow deliberate process of improving its system to enable us to meet the demands of the future.

I assure you this subject has my attention and commitment to insure that SSA is prepared to meet the current and future demands placed on its computer system.

Thank you for this opportunity to appear before you. I will be happy to answer any questions.

Chairman RANGEL. Mr. Jacobs.

Mr. JACOBS. Thank you, Mr. Chairman.

Mr. Commissioner, you say the administrative system is tape oriented. Actually, I am inclined to ask you what color is that tape?

Mr. SVAHN. Red.

Mr. JACOBS. I had a letter from a constituent and the worm turns eventually. This is a receptive letter. The burden of the message is that this constituent requested a status report of his earnings and after some delay received the status report which was about 3 years in arrears, that is to say the request was made in 1980, the report was made in 1980 and the status was reported circa 1977.

He was further told that after 3 years or 3½ years it is too late to make a correction. Is that true and, if that is true and there is no way to post more quickly, should the period for correction at least be extended to that time when the beneficiary taxpayer finds out that the record is incorrect.

Mr. SVAHN. Mr. Jacobs, there are two parts to that question. Let me address the first one because it is the easiest. What your constituent was told is not true. You can go back and correct the record in many instances. Unfortunately, because of the state of the system, sometimes we have to go back and reconstruct an entire work history for an individual because perhaps they were using the wrong social security number or SSA used data from the wrong person's file.

The problem that you mention about the posting of wage data being 3 years in arrears is a very serious problem. GAO, I believe, has just finished a report dealing with the backlogs that Social Security has had in annual wage reporting.

If you recall, Congress changed the law effective in 1978 to go to annual wage reporting. Social Security, again because of the antiquated systems, attempted to move manually.

I stand corrected. It was not GAO; it was the HHS audit agency that did the report.

The Social Security Administration just this month completed the posting of the bulk of 1978 and 1979 wages. We are now working on cleaning up the last of the postings for those years.

I am assured daily we will be caught up quickly, but given our past record, I am a little concerned. It is one of our priorities to update wage posting and to get it on a current basis.

Mr. JACOBS. Let me be more specific and say on September 4, 1980, this gentleman, Jack Holmes of Indianapolis, Ind., was given a status report of his wage earnings as far as Social Security and the status was completed through December 1977.

He went on to say Social Security advises that if you wait more than 3 years, 3 months, and 15 days after the error occurs, the error cannot be corrected.

Is there anything to that?

Mr. SVAHN. No. As I say, that is not true. In some cases we are able to go back and correct wage records to where a person first started working.

Mr. JACOBS. I am glad to have that on the record.

The only other question I have, Mr. Chairman, would in times of budget constraint and the confusion between what is an investment and what is an expenditure and what is a savings item in Social Security or Medicare and what is an expenditure item, what do you figure it would cost to buy some new machinery over there and some new software?

Mr. SVAHN. A lot of money. There have been some estimates made and the amounts are in the hundreds of millions of dollars. We are talking about a very huge, huge operation.

Mr. JACOBS. Let's say it is in the amount of——

Mr. SVAHN. Say $400 to $500 million.

Mr. JACOBS. $400 to $500 million which, incidentally, and interestingly enough is about the amount that this administration offered in military equipment to Pakistan which Pakistan said it couldn't use.

How much would we save with the $400 million? We have already saved it in the arms because those people, thank God, said they didn't want to in that case; and how soon do we save it?

Mr. SVAHN. I had a group of people looking at the systems problems in Social Security during the transition, a group of volunteer systems experts from around the country. They did not want to be held to the number but they indicated to me that you are talking about a $400 to $500 million expenditure and that what we were talking about in terms of time is a 4- to 5-year time period.

That is not just to buy a piece of hardware or machinery. The machinery is cheap, but creating the software is the real problem in the conversion costs and that takes a long period of time.

Mr. JACOBS. How much do you save for the $400 or $500 million?

Mr. SVAHN. I don't know of any savings estimates that have been made, Mr. Jacobs. I guess you have to look at what the cost of not doing it is. At the present time we have tremendous backlogs. We do not provide beneficiaries with up-to-date wage records and with up-to-date statements in terms of what their benefits would be.

We are unable to calculate many benefits on an automated system Our manual correction system is almost as big as our automated system.

Mr. JACOBS. You have proposed to pay retirement benefits to people who are not retired; is that not correct, Mr. Commissioner?

Mr. SVAHN. I believe you are referring to the elimination of the earnings test.

Mr. JACOBS. No, I think it is called the retirement——

Mr. SVAHN. Retirement earnings test.

Mr. JACOBS. Yes. If you did not give wealthy people security benefits—people who have high salaries and high earned income—how much would you save toward buying this equipment?

Mr. SVAHN. What you are referring to there is putting in a means test.

Mr. JACOBS. No. Negative. Wrong. Since 1936, there has been a condition to Social Security that retirement benefits would be paid only if you were retired and the retirement test is that test by which you determine whether a beneficiary or potential beneficiary is retired.

I yield to the gentleman from Texas. Yes.

Mr. SVAHN. I am sorry I missed the last part.

Mr. JACOBS. I thought Mr. Archer might want to fire an arrow at this point.

But it is not a means test at all; it is a retirement test and a retirement program, and I am asking if your proposal is not accepted by the Congres how much money will be saved in liberalized benefits that would not be paid?

Mr. SVAHN. I did not come here prepared to testify to that, Mr. Jacobs, but I believe over a 5-year period that proposal would cost roughly $6 billion.

Mr. JACOBS. It would begin costing roughly $6 billion annually?

Mr. SVAHN. $6 billion over 5 years.

Mr. JACOBS. One-half of one of those $6 billion would bring us up to speed on this problem, wouldn't it?

Mr. SVAHN. Yes. As I said, that is a 5-year figure and one-half of $1 billion would bring us up to speed over that 5-year period. Roughly it is less than 1 percent of the expenditures on an annual basis for that program.

Mr. JACOBS. The annual costs, I am told, once it is fully implemented, proposal to pay retirement benefits to people who are not retired would be about $2 billion a year so it would be one-fourth of 1 year's golf cart money you pay out to men who are working and have high salaries. If the Social Security Administration's figures in the past are accurate, 95 percent or more of the people on Social Security could not earn substantially greater amounts than the present retirement test.

I commend that for your consideration.

I thank the chairman for the time.

Chairman RANGEL. As an addition to that I advise the audience on May 28 Chairman Pickle will be holding Social Security hearings on the suggestions made by the administration to give you a little more time to be prepared to answer some of these questions.

I am still a little confused, Mr. Commissioner. The system has not worked. Everyone has added onto the system. You are moving into a new place with the old system. It is pretty fouled up.

The President is now talking about very dramatic changes. You are not even up-to-date with the old law and we are fearful not only politically but we have a responsibility to those people out there and if it is getting worse, administration after administration, or year after year, then we are bound to propose rather revolutionary changes.

You don't leave me this morning feeling any sense of security about the social security system. Nor do I see any recommendations or requests—unless I missed them—that you would want the Congress assistance.

I don't understand how a nation that leads the free world can get fouled up in just a check-paying system. We got the Shuttle up there and somehow we have just accepted the fact that this machine is bigger than the U.S. Government and it won't work and I am not going to accept that.

I want to know what are we going to do about it.

You said it would take a half billion dollars to get a new machine. That doesn't help me because if you get another bad machine then we are right back where we were.

Is there not somewhere or some agency that is doing a good job with a similar type problem?

Mr. SVAHN. I think if we look at private industry—and Social Security has been likened to the largest insurance company in the United States—there isn't one that operates as Social Security does.

I would like to point out, though, it is more than just a checkwriting machine. It does a lot of things and it has had things added to it and hung onto it, things like draft registration, annual wage reporting, all kinds of things that are in addition to the checkwriting capacity.

Chairman RANGEL. There is a tendency that more things, unfortunately, will be added to it as we find the social security number being used as identification for other people's systems.

It looks down the line with or without new legislation we are going to expand the system. What compares to the social security system that we can have a handle on? None of us in the Congress has a handle on what any administration is talking about.

What is the closest type of system in the private sector?

Mr. SVAHN. I am informed that the Internal Revenue Service has one that is about the same size but not of the same complexity because they don't do benefit computations and things like that.

Chairman RANGEL. Why don't you let someone testify about the IRS system? Do they have problems? At least they enjoy a good reputation.

Mr. DiPENTIMA. We do have knowledge that IRS has just gone through an extensive contract with the National Academy of Sciences specifically to look at their computer systems.

They have some problems but not of the magnitude that we face.

Chairman RANGEL. I have some other questions but maybe my colleagues can sharpen those questions because we all have the same objectives, that is, trying to understand each other, trying to understand the scope of the problem, but, most importantly, trying to figure out what we are going to do to handle it.

I still am a little confused but we will get back to that.

Mr. Archer.

Mr. ARCHER. Mr. Commissioner, do you have any suggestions as to what this Congress can do to help you?

Mr. SVAHN. Mr. Archer, I think by being here today and by providing an open forum to discuss the problems that we face, you are starting on that track and I welcome it.

We will be coming back, I feel certain, once we have a plan devised to upgrade the entire operation. We will be coming back to the Congress and welcome the assistance of these subcommittees in getting that proposal enacted.

I am sure that the Appropriations Committees will have something to say about it as will several other committees.

I think the nature of the problem is so critical that we must begin now. People tell me that it is going to take 4 years or 5 years in order to get this resolved, and I point out that if we had started that length of time ago, we would be in much better shape now.

So I believe we are going to start and we will develop a plan for modernizing SSA's capability.

Mr. ARCHER. Do you have some sort of task force working on making recommendations?

Mr. SVAHN. Mr. Archer, Social Security has been criticized in the past for not having an organization that did advanced systems planning, in other words, planned for where that system would have to be 2 or 5 or 10 years from now.

They established an organization that did exactly that job, and it was an advanced systems planning organization.

In the reorganization of 3 years ago that unit was abolished. It is my intention to put a similar group together in Social Security to design the long-range plan for the systems operation.

Mr. ARCHER. Do you need any further authorization or appropriations from us in order to be able to accomplish that?

Mr. SVAHN. I can't answer that question right now, Mr. Archer. I am not prepared to come before the Congress and say I would like to have $500 million to go fix the social security system.

Mr. ARCHER. No, I mean with respect to funding a task force or a commission.

Mr. SVAHN. No. We can do that.

Mr. ARCHER. You need no further help from us on that?

Mr. SVAHN. No, sir.

Mr. ARCHER. Do you have any projections at all as to the amount of time it will take before we might have some concrete recommendations for an overall solution?

Mr. SVAHN. This is our highest administrative priority in Social Security. I can't say when we will have the plan developed. I can only assure you there will be a plan and there will be a number of people working long hours on it.

Mr. ARCHER. Let me move to some specific questions. Although from what you have said maybe all of these specific questions may be premature at this time.

At least a part of medicare, if not a major portion, is currently being handled by outside private contractors, according to my understanding.

To what extent do you believe that segments of the SSA data-processing operation can be done more efficiently and economically by private contractors and to what extent can the SSA's software program and development maintenance be done more efficiently by private contractors, in your opinion?

Mr. SVAHN. There are two points there. First, in dealing with the software maintenance, it is extremely difficult to get anyone to be able to work on the software maintenance other than the people who have designed it because the documentation is so poor.

Having been in private industry and done some systems design work, I am sure there are contractors who will take any job. But I

13

don't know of anyone who can responsibly say, "Yes; we will maintain your undocumented software."

I think that contracting for new systems design and software is an appropriate option to look at.

As I said before, we do have a significant problem in keeping programers right now just to maintain the current software, let alone do any developmental effort. So we definitely would be looking at that.

In terms of medicare, we could do an awful lot better with the medicare processing and I would use that as an example of our problems.

You can walk into almost any restaurant or department store in the United States and hand them a card and they will call up a central computer and find out whether your credit card is any good and whether you have exceeded your credit limit or anything like that.

We have medicare patients who go into hospitals and in order to check to find out if they are currently eligible for medicare, the hospital sends the information on the patient to the fiscal intermediary who batches it up on tape and puts it on an airplane and sends it to Social Security, in Baltimore where we run the tapes at night to find out if the people have paid their deductible. The information is then sent back to the fiscal intermediary who sends it to the hospital.

Hospitals have asked why can't we do like restaurants and department stores do and just punch in the numbers and find out whether the person has in fact paid the deductible. That is a good question.

The reason they can't do it is the system is tape oriented and won't handle that.

Mr. ARCHER. Sometime ago SSA hired consultants to study agency usage so actual computer needs could be determined.

What do these consultants' reports show as to the SSA computer needs?

Mr. SVAHN. Mr. Archer, there have been many studies of the SSA computer systems. I have two pages of titles from GAO reports.

I am just noticing that we have had a number of outside organizations study our operations, and I think unanimously they have all recommended a complete redesign of Social Security's computer system.

We have passed the point where we can continue to patch that operation. I think we really have to go back and start over and design systems that are needed for Social Security in the latter part of this century.

Mr. ARCHER. One of the problems GAO indicated has been that a huge amount of earnings—roughly $67 billion they say—has not been posted to individual accounts since the initiation of the program in 1937.

GAO demonstrated an automated technique for posting some of these earnings and SSA apparently agreed it had merit and should be incorporated into its existing programs.

Can you tell our committee what is the status of this development or is it being held as a nonpriority project? Are there other problems in the posting of earnings because of systems shortfall?

Mr. SVAHN. I think the number has grown to about $69 billion now, Mr. Archer. I was absolutely flabbergasted when I heard that. The agency has a number of reasons that the number is so large and they point out it is a number that has grown since 1936. But the fact of the matter is it continues to grow. I don't know the status—maybe Mr. Wicklein does—of the recommendation that was made by the General Accounting Office.

It is a problem. The wage reporting and posting of records, as I noted, are 2 years behind. Every time you have something that lags that far behind you are going to lose records and you are going to lose earnings reports.

Cleaning up of the posting is one of our high priorities but, as I say, I am not familiar with the GAO studies.

Mr. WICKLEIN. The posting problem, was identified. We have taken actions—including ones recommended by GAO—to reduce the posting backlogs. We are also looking at how we can effect a system to prevent a recurrence of posting problems.

Chairman RANGEL. Is that $69 billion that is not posted?

Mr. SVAHN. Yes; $69 billion.

Mr. ARCHER. Given the current constraints, can you give us any estimate as to how long it will take to completely upgrade your data system's processing operations, that is, systems design specifications procurement, acquisition, and installation?

Mr. SVAHN. It is not something that can be done overnight. To design new software and to implement it and get it running—I guess the easiest thing to do is to procure the equipment but to design and do any conversion that needs to be done—you are talking 4 or 5 or 6 years.

It is a 4- to 6-year process that we have to start.

Mr. ARCHER. Mr. Commissioner, we certainly will await the results of your evaluation which is ongoing.

As I understand it, today you have no specific time frame as to when you will be back with some recommendations, for which you will need congressional authorization and appropriations.

If you have any kind of general idea as to when you think you would be able to come back with such recommendations I would certainly like to hear it. I don't know whether you have been able to get into it enough to be able to make that to us today but I think it is extremely important.

Mr. SVAHN. I don't have any time frame right now, Mr. Archer, and I hesitate to give you an artificial deadline and get caught up in that kind of thing where we are trying to meet a deadline rather than solve a problem.

I can say that it is a very high priority. We are operating right now with about eight survival projects. In order to do the benefit rate increase which goes into effect in the July checks, we had to start that in February. Progress is measured daily and it is measured in terms of hours.

When we have a thunderstorm that goes through the Baltimore area and causes a power surge, it knocks out the computers and we count the down time in minutes because you have to plan that far

15

in advance in order to make sure that we get those benefit rate increases out the 3d of July.

Mr. ARCHER. Thank you very much.

Chairman RANGEL. Let me say this before we move on to Mr. Gradison.

You paint such a sad picture as to the state of affairs of this ADP system that I am inclined to believe that all of this talk about changing the social security system, making some adjustments and dramatically improving it—we might as well forget any legislation. No one would trust the ADP system to accomplish its current mission; nevertheless, we are talking about making changes and the President is talking about making changes.

Would you not tell the President of the United States you would love to make those changes but it will take you years to get the ADP system in a position to even post the changes in the law and you can't take on any new responsibilities?

You haven't been able to take on any old ones—I don't mean you, I mean the computer.

Mr. SVAHN. I understand what you are saying, Mr. Chairman. In putting together the package of changes that you are referring to, we did take into consideration the administrative needs and the administrative costs that would be necessary in order to accomplish it.

In the items where legislation has been sent to the Hill such as the minimum benefit and the student benefit proposals, we have included the necessary resources to accomplish them.

Now they are not going to be done under a fully automated system. Much of the work will be done manually which is the way Social Security really does many things.

Chairman RANGEL. So any changes in the law from here on in will never go inside that machine. It is going to be done by people outside the computer system.

Mr. SVAHN. I think some will be by machine and some would be done manually. I make no bones about the fact that the system is not able to accommodate a whole lot of things we do currently. We have different proposals that we are looking at right now to be able to upgrade the current status, to build a little more capacity in so that we can eliminate the backlogs. But I think from the standpoint of new proposals we will be able to accomplish those through a combination of automation and manual processing.

Chairman RANGEL. Thank you.

Mr. Gradison.

Mr. GRADISON. Thank you, Mr. Chairman.

Does the system exist somewhere, the machinery necessary, to meet your needs? Are you talking about something that has to be invented or created?

Mr. SVAHN. The machinery exists. As I said, Mr. Gradison, Social Security's system is way, way back in the progression of data processing. I characterized our collection of machinery out there as an antique collection.

Mr. GRADISON. I can remember during the years I worked as assistant to the Secretary of HEW, which was 1955 through 1957, that there were people from IBM and from some of the large national insurance companies that were spending a lot of time in

16

Baltimore observing what was going on at Social Security because this was the biggest data processing operation in the country, there was so much they could learn from us and apply to Metropolitan and the other groups.

It sounds as if that has turned around.

Mr. SVAHN. Somewhere along the line Social Security stopped and the rest of the industry and technology kept right on going.

Mr. GRADISON. Who makes this equipment that would be appropriate? Is it a single supplier or is there a variety of suppliers that would be able to do this job?

Mr. SVAHN. There are a number of suppliers who make equipment to do the job. There are also a number of software firms who can do the systems design and programing.

It is not a matter of lack of either equipment or technology. It is poor planning on the part of the executive branch in the past.

Mr. GRADISON. Is there any concern this would be an extraordinarily large order for any one company or as you said a moment ago, is there a variety of companies that would participate in the supply of this equipment?

How does this work? Do you have to go to one company and say I want all your things because they are compatible with each other?

Mr. SVAHN. No. In the past it has, as I understand, been that way. You can do it, I guess, two ways. One of them would be to go out with a procurement request for all new equipment and all new software that is all compatible so it will work within itself and you open the bidding to firms who have the capability to do that.

The other way is to limit the competitive procurement to providers of equipment and software which are compatible with the equipment and software that you have currently installed so that you can test and run back and forth and run parallel and then switch over.

If you did the latter, you would cut down the number of competitors, but you would still have four or five major organizations that would be competing for that business and it would be a very large piece of business.

Mr. GRADISON. You mentioned the capital costs as $400 or $500 million. Could this also be obtained if it were deemed appropriate through lease rather than purchase?

Mr. SVAHN. I am not sure about that.

Mr. WICKLEIN. The hardware costs in the $500 million figure are relatively small, $20–$30 million. That was based on a purchase cost. If it were leased it would be a sum smaller than that on an annual basis.

Mr. GRADISON. In other words, the bulk of the cost is software?

Mr. WICKLEIN. No, sir.

Mr. SVAHN. Software and conversion.

Mr. GRADISON. What is the status, if you are in a position to respond, of your relationship with OMB on this general issue?

Have they been advised of this potential cost? Are they reviewing this? Are they working with you? Have they said yes or no, or maybe?

Mr. SVAHN. We don't have a final plan as to how we would upgrade the system. I have talked with Mr. Stockman about it and have talked with other people over there about our problem and

the fact that we will be coming to them with a request for a rather large expenditure of funds and man-years to upgrade the system.

Dave Stockman is aware of the problem, as are members of the President's staff in the White House, and they are supportive of us tackling it.

Chairman RANGEL. Will the gentleman please yield?

Mr. GRADISON. I yield back. Thank you, Mr. Chairman. Thank you, Mr. Commissioner.

Chairman RANGEL. You keep using the terminology upgrade the system. I get the impression that the system that you are using has to be eliminated completely, that the tapes are just outmoded and that you can't bring in new pieces to this system.

And anything you come back with will be a new system.

Mr. SVAHN. That is my intention.

Chairman RANGEL. So when you say upgrading you could use the word new system or substitute system and it would have the same meaning; right?

Mr. SVAHN. Yes. I would reserve, if I might, Mr. Chairman, the possibility that there might be something interim in the short term in order to reduce the backlog. But I would be proposing to come back with a new system for social security. I think that the current one we have, as Mr. Gradison mentioned, is based on one that has been around for over 20 years. It has been added to and patched, and it just cannot continue to function.

Chairman RANGEL. When you move to your new location you are going to take the old tape system into the new location, this anti-quated system—how much will it cost?

Why are you moving with this old machinery in the first place?

Mr. SVAHN. I have asked the same question myself, Mr. Chairman, a number of times.

Mr. ROUSSELOT. What answer do you get?

Mr. SVAHN. Two things. There appears to have been in the past a concern that someone spent an awful lot of money on a brandnew building that was finished a couple years ago and has been empty. From that standpoint they wanted to fill it up.

Mr. ROUSSELOT. With people or machines?

Mr. SVAHN. Both. Apparently the building was built specifically as a data processing center and it doesn't have a self-sufficient heating plant in it. It relies in part on computers to generate the heat and that is part of the reason it has not been filled up with people in the interim.

Mr. ROUSSELOT. We certainly are precise, aren't we?

Chairman RANGEL. You may be stuck with the old machines for heat.

Mr. SVAHN. Any private company that had built a data process-ing center like that and had the system that Social Security has would have changed that system, moving into that building, there is no question about it.

Chairman RANGEL. I am sorry we have these hearings.

Mr. ROUSSELOT. Why? I am enjoying it.

Chairman RANGEL. Go ahead, Mr. Rousselot.

Mr. ROUSSELOT. Let me pursue a little further. Was there some reason we were not able to construct the building in the proper

18

way? Was there a committee problem up here, a jurisdictional fight or something?

I understand the Government Operations Committee has a little jurisdictional battle going here. Is that correct?

Mr. SVAHN. I don't know, Mr. Rousselot, whether it is a jurisdictional battle. In reviewing this during the transition I heard reports that came back quite clearly that the Government Operations Committee does have a definite interest in Social Security's ADP systems.

Mr. ROUSSELOT. They have jurisdiction, too, over certain areas of computers, as I understand.

We have a jurisdictional problem with the Government Operations Committee. Did you know that?

Chairman RANGEL. They have a problem trying to define the problem. That is the biggest problem.

Mr. ROUSSELOT. Maybe we can help them out.

Chairman RANGEL. I don't know because if you are going to carry those problems to the new building while the administration is making dramatic changes and, of course, you are not going to use the machines because you are going to do most of it manually, you can't really use the people manually until you get the old machines to provide the heat and the air-conditioning, and you have to get out of the old building for just safety reasons, right? You can't stay there with the old machines.

Mr. SVAHN. There are questions about fire and safety in the old building, yes. Having been designed as a computer center, the new building has security provisions built into it and is much more modern in its approach.

Chairman RANGEL. We do not know what extent of cooperation we will have.

Mr. ROUSSELOT. Mr. Chairman, may I pursue a few other questions?

Chairman RANGEL. I wish you would.

Mr. ROUSSELOT. Mr. Commissioner, first of all let me say I am delighted you are here. On the basis of my understanding in viewing your previous record in other places, I am sure you will take over this gigantic organization and do something with it.

You mention in your statement, page 4, that beginning today it would take SSA 3 or 4 years to completely document existing software, let alone develop new software.

I assume that includes the effort to upgrade. Does it have to take that long?

Mr. SVAHN. I am not sure we would want to completely document our current software. To do that we might be throwing good money after bad. In order to document current software, it would take 3 or 4 years. In order to design new, it would take longer.

Mr. ROUSSELOT. Why would it take so long? Could they do it in the private sector faster? Is it only because we are Government that it takes so long, or am I being naive?

Mr. SVAHN. The fact that we are Government adds to the delay. In the private sector, decisions can be made much quicker; after you make a decision and commit the resources, you go out and get somebody to do it.

Mr. ROUSSELOT. Can this committee or the Government Operations Committee help you to make those quicker decisions once you are ready to make them?

Mr. SVAHN. You do have a problem with the appropriation process.

As I said, when I accepted the position of Commissioner, I talked with members of the President's staff and——

Mr. ROUSSELOT. Dave Stockman is familiar in many ways with the advantages of updated computer operations. As a matter of fact, he was one of the better members on the Hill making use of that in a small way. I know on the basis of my conversations with him he will not be the holdup. I am asking can Congress do anything to make it move faster?

Mr. SVAHN. As I understand it in the past—and I am not assessing any blame—the Social Security Administration has not had an overall plan for upgrading or replacement of its systems. The fact that SSA has not had a plan, and the fact that SSA has consistently come back to the Appropriations Committees in the Congress asking for more and bigger equipment, without a plan for redesigning software, have caused a great deal of congressional interest.

Mr. ROUSSELOT. Was the Appropriations Committee skeptical that they did not know what they were doing?

Mr. SVAHN. I read several transcripts of hearings——

Mr. ROUSSELOT. I bet that was good bedtime reading.

Chairman RANGEL. The question is, can we help you get whatever you need from the Congress, whether it is our committee, Government Operations. He has taken care of David Stockman on the record; that eliminates that problem.

Mr. ROUSSELOT. I really believe he is pretty good on this subject.

Chairman RANGEL. You have this taken care of, so, is there anything we can have in the record that you are requesting us to do?

Mr. SVAHN. I have to say at the moment, Mr. Chairman, no, there is not anything I am requesting the Congress to do. I have to develop the plan——

Mr. ROUSSELOT. How long will that take?

Mr. SVAHN. As I told Mr. Archer, I cannot commit to an artificial date.

Mr. ROUSSELOT. A year?

Mr. SVAHN. Oh, no.

Mr. ROUSSELOT. Six months?

Mr. SVAHN. I would hope to be back in less than 6 months.

Mr. ROUSSELOT. Would it be helpful to have an on-the-scene inspection of the new building—unless it is sinking in the swamp like the post office up in New Jersey.

Mr. SVAHN. You heard about the swamp.

Mr. ROUSSELOT. My former colleague, Mr. Gross, went up to watch that great postal facility sink in the swamp. I wonder if other than the building itself, what can we do to give you the capability of moving ahead? I realize you want the plan and you want to be sure you are coming to us knowing what you are doing. You think that may take 6 months, or maybe sooner, but what can we do in the meantime to have the understanding and push to assist when you are ready to tell us what you need?

20

Mr. SVAHN. I welcome your interest now, and I would welcome you if the subcommittee would like to come out and view the new building and look at the old building. We have beefed up security, but I think we can get you cleared.

Mr. ROUSSELOT. I hope so.

Mr. SVAHN. We would welcome that. It is a large facility——

Mr. ROUSSELOT. I just wondered if our presence there or focusing on it would be helpful, that is all.

Mr. SVAHN. As I said, I think any interest would be helpful, and the more knowledgeable the members are of the problems, the more helpful they can be.

Mr. ROUSSELOT. Let me be sure I understand this. You say that as to present posting we are working on 1978?

Mr. SVAHN. We are just finishing 1978 and 1979 now.

Mr. ROUSSELOT. That is certainly good news.

Is that because all the equipment is so old, the capability to record, or what is the problem?

Mr. SVAHN. I guess it is all of the above. We were not able to handle it.

Mr. ROUSSELOT. As my chairman is saying, would more people help to solve that or not?

Mr. SVAHN. We have added a number of staff to work on the problem, Mr. Chairman. We are not under any freeze or any limitation on the number of people.

Mr. ROUSSELOT. To update, you have adequate personnel?

Mr. SVAHN. Yes.

Chairman RANGEL. Is there some conflict in your testimony about losing people to the private sector and income limitations and restrictions on personnel?

Mr. SVAHN. Well, because you have the authority and funds to hire people does not mean you can get the people. The agency was also under a freeze last year.

Because of our archaic software and antiquated machines and the fact we do not have documented systems, it is difficult to get programers to come in at the salary level we hire at and stay with social security for a number of reasons, such as grade classifications and other things within the system.

Chairman RANGEL. That is a matter of administrative policy, right? You do not need laws to change that.

Mr. SVAHN. No, we do not need laws to change that.

Mr. ROUSSELOT. Part of the reason for the attraction in the private sector is higher pay scales.

On page 9 you say: "Over the past year we have lost approximately 20 percent of our programing staff, over 100 people."

Is that primarily because of pay?

Mr. WICKLEIN. It is pay and the fact that going into private industry, a programer has an opportunity to work on newer hardware and software.

Mr. ROUSSELOT. He likes the challenge of new equipment.

Chairman RANGEL. Well, the pay is the President's policy, he caps the pay.

Mr. SVAHN. I think what we are talking about here, Mr. Chairman, is the function—and I am not sure, but I believe, it is OPM's function—to determine the classification scale for programers.

Chairman RANGEL. I was trying to get the Congress out of it. Whatever your problems are, they are all the administration's, your grading, your personnel, or the fact you will not request new equipment, whatever it is, it is clearly not the failure of Congress to recognize the problem, it is the failure of this and previous administrations to come up with any answers as it relates to personnel and equipment, and the Congress has done all it could to improve it, right?

Mr. SVAHN. I have not been a student of what Congress has done in the personnel area.

Chairman RANGEL. Based on what you know, we have not done anything by putting caps on hiring, from what you see, it is basically an administrative policy, and when you find out what corrections can be made, you will come back to us, but as of now, we will have to wait until you get a firm handle on the problem, and you will come back. Meanwhile, you will move that "old" equipment into a new building, and you may even decide after you get there that you need new equipment, but we will know when you get there, right?

Mr. SVAHN. I think so right now, since the agency has been committed to that move and has already procured and put in a number of computers in the new building. I had seriously considered stopping the move, but I have come to the conclusion that would not serve any purpose. We are better to finish the move and complete a plan for installing a new system.

Mr. ROUSSELOT. I just wanted to pursue further that one point—do you have a civil service problem of classification? Are your programers classified at a lower level than on a competitive basis they would be classified in the private sector?

Mr. WICKLEIN. They are paid less money, yes.

Mr. ROUSSELOT. They need a higher GS rating?

Mr. WICKLEIN. That is not within our control. That is OPM, yes.

Mr. ROUSSELOT. All right, they need a higher level. So we have to get after the OPM to up the level of programers; that is how they are graded.

Chairman RANGEL. That is an administration decision. We cannot interfere with the administration's policy.

Mr. ROUSSELOT. Unless there is a freeze on it.

Thank you.

Chairman RANGEL. Mr. Jacobs.

Mr. JACOBS. Mr. Commissioner, is it true that you are using Air Force computers now for part of your work?

Mr. WICKLEIN. No. We are investigating the possibility of using an Air Force computer in San Antonio, Tex., to offload some of our work to make up for the shortfall in capacity we have internally.

Mr. JACOBS. You are not using any of the Air Force services down here just past Landmark, wherever, in Springfield? None of that computer capability?

Mr. WICKLEIN. You may be alluding to a contract with the Federal Simulation Center for studies, not for computer time. They are in the business of measuring capacity on computers and recommending configuration strategies.

Mr. JACOBS. Are the computers in San Antonio more up to date?

Mr. WICKLEIN. Yes, sir, modern technology.

Mr. JACOBS. If you can use the ones in San Antonio, is it fair to infer they have excess capacity beyond military needs?

Mr. WICKLEIN. They have some limited excess capacity now that we are contemplating using.

Mr. JACOBS. So the answer is yes, they do have excess capacity which can be used by the SSA, by contract.

Does that strike you as strange, that one branch has excess capacity while this branch of Government has lack of capacity?

Mr. SVAHN. I do not know that it strikes us as strange, and I do not know the situation that exists as to the Air Force computers. They may well have those computers programed to utilize all their capacity, but in their plan have limited capacity we can use. What we are talking about doing there is not setting up the Air Force as a data processing center for social security, but merely to rent some time from them. It is time sharing, I am told.

Mr. JACOBS. You can do that in a short period of time, then withdraw?

Mr. WICKLEIN. Yes, we anticipate beginning in 2 or 3 months. We are not now buying time from San Antonio, and we have a cancellation clause in the contract of 120 days, should either party no longer want to keep the agreement in place.

Mr. JACOBS. In other words, they have the modern equipment and you do not?

Mr. WICKLEIN. Yes.

Mr. JACOBS. Does that mean the military is more efficient than the SSA? Because if they are, you are in a hell of a fix.

Mr. SVAHN. I would be a little bit nervous about that.

Mr. JACOBS. Would you want to say something about partition strategy, or have you covered that?

Mr. SVAHN. No, we have not covered that. It is a code word, I guess, that is being used at the present time. Social Security policy is to proceed along what they call the partition strategy, wherein you break up the operation of the social security system into seven parts, the parts are logically related, then you bid out or upgrade a new system for each one of those parts. It is a strategy that the Agency has been using, I believe, for about 2 years.

I have some problems with it, two problems: one, I am not sure it is the way to go, because it says we will redesign what we have, and second, it will not be done for about 10 years, and that is fairly optimistic. So, I am a little perturbed about that; we are reassessing that strategy right now.

Mr. JACOBS. What is the competitive capacity in terms of the supplying of the new hardware you will be getting? Is there more than one company?

Mr. SVAHN. Oh, yes, as I indicated, if we were to just go out and open it up for unlimited bidding, which of course involves some conversion costs, there are probably seven or eight firms, large firms, who would be bidding to resupply equipment, and I imagine many more would be bidding on the software.

If we were to limit it to equipment which is compatible to our current programs, then you are probably talking about four or five firms. I am sure they would all bid on a system that large.

Mr. JACOBS. Mr. Commissioner, I am sure that we all wish you well. I do not know how many hearings you have endured so far,

but there is some give and take and sometimes you may feel as though you are in the arena, but I am quite certain you have the good will and good wishes of the members of the committee as you embark on this task.

Chairman RANGEL. When did you say you would be getting back to us, Mr. Commissioner?

Mr. SVAHN. What I said in response to Mr. Rousselot's question, Mr. Chairman, was that we are developing a plan as to how we would replace and upgrade the equipment and software. It is my intention to move that as a No. 1 administrative priority of the agency and to commit the resources to do that.

Both Mr. Rousselot and Mr. Archer asked for a date certain. I tried to evade that question as tactfully as I could. I do not have a date certain, and I would hate to get locked into an artificial date, whereby we start trying to meet the date instead of the need, and the need is to develop a plan as rapidly as possible to replace the hardware and software.

Chairman RANGEL. Do you have a date certain as to when you are making the physical move to the new plant?

Mr. SVAHN. That move has already started.

Chairman RANGEL. When will that be completed?

Mr. SVAHN. In 18 months. The move actually started last year.

Chairman RANGEL. So whatever plan you come up with will be within that new building, that is for certain.

Mr. SVAHN. Yes, sir.

Chairman RANGEL. Chairman Pickle and I sent a letter on April 14 and we asked him detailed questions. We hope we can get some answers to that prior to the time you come up with an overall plan. These questions merely deal with the extent of the backlog and why you are moving, and I guess you are saying that you have had your reservations but in looking over the entire picture, that you just decided it would be more efficient at this time to move.

Mr. SVAHN. That is correct.

I have read your letter and have worked on the answers. I apologize for not having the answers here before this hearing. I do not like to have mail sitting around unanswered. Unfortunately, we have a clearance process and there are a lot of people who want to help me answer your questions. So, you will have the answers in a day or so.

Chairman RANGEL. I cannot conceive how you can deal with administrative changes within the last 18 months, but you did tell them you could by manual——

Mr. SVAHN. I believe we can.

Chairman RANGEL. Assuming we did everything the President requested, and we will not——

Mr. ROUSSELOT. Some of us will.

Chairman RANGEL [continuing]. How many people will you hire to do this work? I cannot imagine hiring people to do this type of work manually. Can you not give it to the Air Force? Could you not go to Metropolitan Life or the Air Force and say a change is being made—are we saying the system is so bad we are going to have to go back to having people do this work manually?

Mr. SVAHN. Mr. Chairman, that is not a new phenomenon at Social Security. The statute has been changed before. Almost every

year there are a series of amendments that are enacted, and the Social Security Administration commits itself to brute force and does get the checks out and does pay benefits.

Chairman RANGEL. So there will not be any problem there, you can handle any changes that may occur? I do not know what you told them, but——

Mr. SVAHN. What I am saying is we can handle the changes that have been proposed. I would not go so far as to say we can handle any changes.

Chairman RANGEL. All right. I did not mean to put you on the spot; that is better phrasing.

Mr. Rousselot.

Mr. ROUSSELOT. You stated you think you could have the answers to Mr. Rangel and Mr. Pickle's letter within the week?

Mr. SVAHN. Yes.

Mr. ROUSSELOT. Because I think not only your testimony and other items should be included in whatever report we put out, it would be helpful to have that.

Again let me understand, if I can, when you talk about upgrading the system, you are talking about modernizing it and putting it in place the way it should be.

Under present circumstances, you think that would take 5 to 6 years?

Mr. SVAHN. Yes, it would take 5 years to do that.

Mr. ROUSSELOT. But you will look at it and when you get ready to propose this plan, I hope you will search very hard for a way to do it faster.

Mr. SVAHN. Yes, and I think there will be interim changes during that period, but I think we have to start now to change the system. That includes the telecommunications network in the field offices, the district offices, where they are able to communicate with the central office and determine people's benefits and that sort of thing.

We are already moving on an upgrade of this equipment. In fact, in many of our district offices right now, we have teletype machines which we use to communicate, which is not very fast or very efficient.

Mr. ROUSSELOT. Mr. Chairman, I want to make a recommendation to our Commissioner which relates to another matter before this committee. We hear that a lot of our Social Security people in the field offices have been recommending that people take early retirement at 62, because "it is a better deal." I think since we are seriously having to look at the whole program that we can encourage the employees in the field not to stimulate so much early retirement, because it causes a problem in costs, as you well know.

Part of the problem we have had is all these people calling our offices and saying look, I have a contract, I was told this would be there for me when I got to 62, and it was not in the original system.

Part of the problem is that our Social Security employees in some places very honestly have told people it is a better deal to retire at 62, because "by the time you get to 65, the escalations give you a better situation, so you may as well take early retirement."

That I know to be a factual statement.

Chairman RANGEL. Well, wait a minute.

Mr. ROUSSELOT. You can get into the discussion if you want to.

Chairman RANGEL. Maybe I did not understand your question.

Mr. ROUSSELOT. It was a statement.

Chairman RANGEL. You are saying that they should tell people not to give the best assistance to our aged——

Mr. ROUSSELOT. I am not saying that, I am saying I do not think we should overstimulate early retirement.

Chairman RANGEL. I am saying when someone comes to one of the Social Security employees and they are representing the Government, and they are asked what is the best deal for my future and they have analyzed this as experts and have reached a conclusion, that for these old folks, it would be 62, that they should withhold that information?

Mr. ROUSSELOT. I did not say that. I just do not think it should be a recommendation, because you are beating the system if you retire early, because you will do a lot better if you retire early at 62, because of the way the thing is set up, than if you wait until 65, that is all.

Chairman RANGEL. So, they should withhold this information?

Mr. ROUSSELOT. I did not say that; you are not going to put those words in my mouth.

Chairman RANGEL. You are saying the old folks should find out on their own, they should not expect the Government people to tell them?

Mr. ROUSSELOT. I did not say that, either.

Chairman RANGEL. They should not tell the truth, that is what they should do——

Mr. ROUSSELOT. I did not say that, either.

Chairman RANGEL. I think the record is clear.

Mr. ROUSSELOT. Oh, you do?

Chairman RANGEL. Let me say that you tell your people to do the best job they can for our citizens and the country, whatever it is.

Mr. SVAHN. Mr. Chairman, I think the vast majority of the employees of the SSA try to do just that.

Mr. ROUSSELOT. By the way, I do, too.

Mr. SVAHN. There are 83,000 employees in the system, and you cannot control what each one says. It is the policy of the agency to explain all the options available to someone when they come in, but not to make any recommendations.

On several occasions I have asked the actuaries at the SSA for a review of that precise question—whether or not it is advantageous for a person to take his benefit at 62 rather than 65—and they assured me that on the average there is no difference. But as I say, I know there is a feeling that it is more advantageous to take it at 62.

Chairman RANGEL. If you do not like the law, change it, but I do not see how you could even consider not telling the truth.

Mr. ROUSSELOT. Who said that?

Chairman RANGEL. I do not see how you could consider not telling the recipient about what might be a better deal. Whatever is the best deal, if you want to call it that——

Mr. ROUSSELOT. Best option; how is that?

Chairman RANGEL. I do not care what you call it. There is an obligation to tell them there is a better option, and if you do not like the option, change the law.

Mr. ROUSSELOT. We are trying, but you do not want to.

Chairman RANGEL. I do not think the problem is on this side. Thank you. The record will remain open for additional questions. I think you have been candid with us. I understand that Government Operations will be having some hearings. Our staff will be anxious to cooperate with you to make sure you do not have this dual jurisdiction problem. We will share testimony with them, and if we have to call you back as a result of GAO testimony or some private sector testimony, it will be in the spirit of trying to improve the system.

Any questions, Mr. Jacobs or Mr. Rousselot?

Mr. JACOBS. No.

Mr. ROUSSELOT. No.

Chairman RANGEL. Thank you very much. The hearing is adjourned.

[Whereupon, at 11:30 a.m., the hearing was adjourned.]

[The following was submitted for the record:]

THE SECRETARY OF HEALTH AND HUMAN SERVICES
WASHINGTON, D.C. 20201

MAY 28 1981

The Honorable J. J. Pickle
Chairman, Subcommittee on
   Social Security
Committee on Ways and Means
House of Representatives
Washington, D.C.   20515

Dear Mr. Pickle:

     In your letter of April 14, 1981 you indicated that you were
interested in understanding the nature and seriousness of SSA's
system crisis. To ensure that my response meets this need, I
have included an overview of the SSA ADP environment with my
responses to your specific questions. I trust that this
information will be helpful to you.

     A similar letter is being sent to Representative Rangel.

                              Sincerely,

                              Richard S. Schweiker
                              Secretary

Enclosures

Overview of SSA's ADP Environment

The Social Security Administration does face a severe crisis in its ADP processing functions. The crisis is apparent in all aspects of the SSA ADP environment, including software, hardware and personnel. As a backdrop for the specific information you have requested, an overview of the major problems in SSA's ADP environment may be of assistance. Responses to the specific questions in your letter highlight some of the actions this Administration is taking to address these problems.

Because of such factors as high visibility and cost, the focus of most outside attention has been on hardware. However, equal attention to software and personnel is needed if we are to resolve these very serious problems.

Software

The crisis is quite severe with respect to SSA's software. SSA's operational strategy of the last 20 years has been the automation, as early as possible and to the maximum extent feasible, of the legal and administrative processes called for in Social Security legislation. Accordingly, the Agency has opted to modify existing computer systems, rather than undertake the more time-consuming process of designing entirely new systems. This has resulted in enormously large, complex and patchwork systems encompassing decades of different programming techniques. Our programs are archaic and have not been redesigned to take advantage of new hardware as it is introduced.

To further exacerbate SSA's software problems, none of the computer programs for SSA's basic operations is fully documented according to the Federal Information Processing standard or any other standard. Many are not documented at all. This lack of software documentation is critical, since software documentation permits ADP personnel to work with software with which they are not familiar. With our current software, new ADP people are not able to work effectively without the help of someone who was involved in the original design.

The cost of SSA operating with archaic, undocumented software is threefold. First, there is the direct cost of machine time. Simply stated, the software is inefficient and precludes efficient use of hardware. Accordingly, the Agency requires more hardware capacity than it would otherwise need to support its operation.

Secondly, the software is expensive to maintain. SSA's archaic
software systems require an ever increasing workyear commitment
for maintenance. Currently SSA expends over two-thirds of its
programmer resources on maintenance.

Application of modern programming and design techniques would
substantially reduce the workyear cost for software maintenance.

The third cost of undocumented, complex software is that in order
to change a computer program successfully, an in-depth knowledge
of the program is necessary. Sufficient knowledge of any one
computer program or software system is usually confined to very
few people. Accordingly, the loss of experienced people impacts
significantly on programming capacities. Additionally, when
major changes are required in a particular area, it is impossible
to reassign personnel in large groups to work in parallel.

Hardware

SSA's current hardware configuration, i.e., the arrangement and
number of its computers and support equipment, is antiquated and
inefficient. SSA operates 13 "large scale" computers devoted to
operational workloads. None of these computers is manufactured
any longer. Their configurations are inappropriate to the
workload and are self limiting. Because of this configuration,
we waste approximately 30 percent of the installed central
processing unit (CPU) power that we pay for.

The 13 computers are arranged in groups or complexes in order to
share peripheral devices (tape drives, disk drives, and
printers). There are five such complexes. The scheduling of the
workloads over these five complexes is a difficult and labor
intensive task. Our long-term strategy is to obtain fewer but
more powerful and modern computers. Under this approach, SSA
would require less staff and time to operate its computers.

Some of SSA's major production jobs (e.g., the annual recomputa-
tion of benefits to include additional earnings) have grown so
large that they can only operate in a timely manner on one
computer (SSA's Test and Develop - TTSF computer). SSA has no
backup for this computer. The TTSF computer also supports
testing and developing of new software. It is saturated and its
work cannot be shifted to another computer. This saturation
delays the development and testing of new software. Similarly,
the computer supporting SSA's telecommunications network is
saturated. These issues can be resolved only by additional
computer capacity.

Moreover, SSA's antiquated ADP environment is primarily dependent on computer tapes, as compared to mass storage. Over 30,000 production jobs are run each month which require more than 150,000 tapes to be mounted on tape drives. Handling this large volume of tapes results in the wrong tapes being processed and tapes being misplaced. Additionally, the use of magnetic tapes slows response times to ADP users, delays service in field offices, and requires additional workyears to transport, mount and maintain tape files.

Staffing

Compounding SSA's hardware and software problems has been the loss of experienced programming personnel. Existing ADP staffing levels are approaching 80 percent of the level of just one year ago. A numeric evaluation of ADP staffing losses, however, is highly misleading. Undocumented, patchwork software makes the loss of experienced programmer personnel particularly critical. Newly recruited and trained programmers cannot be prepared adequately to confront undocumented programs and systems comprised of archaic programming techniques. Accordingly, experienced programmers (i.e., programmers familiar with the existing undocumented, patchwork systems) are irreplaceable.

SSA also has a severe shortage of technical analysts and procurement analysts. These are the personnel necessary to perform equipment analysis, feasibility studies, ADP economic analysis, and the like. Moreover, these individuals are needed to write procurement requirements for new computer hardware. Competition for individuals with the required expertise is strong within and outside of Government.

1. Some persons believe that because of increasing demands upon an antiquated system we could be close to a breakdown or at least a "brown-out" of computer capacity. Do you agree?

RESPONSE

Your letter notes that the last four Commissioners of Social Security pointed to ADP systems as the most difficult problem being encountered in the administration of the program. SSA's new Commissioner, Mr. Jack Svahn, shares their concern. However, absent the unprecedented loss of ADP staff or computer hardware for which there is no backup, a complete breakdown of SSA computer operations is highly unlikely.

However, if the problems referred to in the "overview" were permitted to continue, a steady deterioration of SSA's ADP capacity would be likely. SSA is currently experiencing what could be termed a "brown-out" of ADP capacity. By "brown-out" we are referring to a reduction in SSA's standard of ADP service and an inability to automate effectively a considerable workload. SSA is meeting its current ADP operating schedules only 45 to 75 percent of the time. A reasonable goal is at least 90 percent. Post-entitlement processing has been reduced from four to three times per week; we should be processing 5 days per week. On occasion, SSA has deferred processing SSI workloads for as long as a week. In addition, potential ADP users are not initiating cost-effective ADP applications in recognition of SSA's limited ADP resources, and tasks which could be done more efficiently, such as Medicare data processing, are done in a cumbersome manner.

2A. We understand that there is a growing backlog of work for
the computer and it is increasing rapidly. We understand
that a very substantial amount of work that should be done
by ADP is already being done manually. We understand the
implementation of the Disability Amendments of 1980 and
Public Law 96-473 of last session are being delayed because
of lack of systems capacity.

RESPONSE

Implementation of the Disability Amendments of 1980 (P.L.
96-265) has not been delayed because of lack of systems
capability. You and Representative Rangel asked a similar
question in your March 6, 1981 letter to me. As I stated in
my reply, where SSA's ADP environment precludes automated
processing, SSA has been implementing the provisions manual-
ly. Implementation planning provides for automation of a
number of provisions that, for now, have been implemented
manually.

With respect to P.L. 96-473; i.e., the "Prisoners" provi-
sion, the legislation was effective on the date of entitle-
ment. There are issues not related to the lack of systems
capability that have delayed full implementation--for
example, delays in receiving information from the States.
However, we are implementing the legislation with existing
ADP capabilities.

It is true that a substantial backlog of work requiring ADP
resources exists. SSA's ADP resources have been impacted by
the Omnibus Reconciliation Act (P.L. 96-499) as well as by
P.L. 96-265 and P.L. 96-473. Our resources are limited, and
projects must compete for priority. As discussed in the
"overview," there are a limited number of experienced
programmers with knowledge of SSA's undocumented software.
Current programmer recruitment and training efforts are,
however, targeted to the areas most severely impacted by the
recent legislation.

2B. If we enact substantial amendments to the Social Security
Act this year, such as the President's minimum benefit
provision, wouldn't this result in further backlog in the
system?

RESPONSE

Any new legislation requiring ADP support is going to
increase the systems backlog and continue manual processing,
in whole or in part, of workloads that should be automated.
This does not suggest that new legislative mandates would
not be implemented. They would be assigned high priority
and implemented manually where automation does not occur.
In fact, the Administration has provided the workyears for
manual implementation of proposed legislation. Furthermore,
the Administration has provided for an increase of 700 work-
years in SSA's systems component in fiscal year 1982.

The present level of programmer resources; i.e., approxi-
mately 285 programmer workyears, is inadequate to maintain
current systems. Accordingly, a number of ADP projects must
be deferred. This means that most operating processes will
have to continue without improving processing times,
eliminating manual operations, and realizing potential
savings through greater ADP application.

This does not mean, however, that new legislation cannot be
implemented. For example, SSA is implementing the provi-
sions of P.L. 96-265, section 501, in a manual mode in order
to meet the July 1, 1981 effective date. We expect, how-
ever, to have a semi-automated process in place by October
1, 1981 and plan to pursue even more extensive automation
shortly thereafter. If we have new legislation to imple-
ment, we will continue the semi-automated process and delay
further automation until we are able to upgrade the
systems.

2C. Would you give us a detailed list of the deferred systems workload with some indications of how priorities are established for its accomplishment?

RESPONSE

ADP resources are being limited primarily to those mainte-nance workloads which support cyclical operations such as enumeration, claims processing, benefit payments, accounting/actuarial estimates, and required data exchange with States and other Federal agencies. In addition, we have identified and prioritized those ADP initiatives that are essential for continued SSA operations. These "survival projects" include such initiatives as the benefit rate increase, annual benefit computations due to additional earn-ings, and judicial and legislative mandates that do not lend themselves to manual implementation.

This list of priorities leaves some small capacity to be applied to the problems plaguing SSA's current ADP environ-ment. Minimal resources are being directed at documenting, rewriting and redesigning existing antiquated systems.

The list of deferred ADP initiatives is extensive. As dis-cussed previously, in a number of instances, potential ADP users are not initiating cost-effective ADP applications in recognition of SSA's limited ADP resources. Many of the ADP projects in the backlog entail full automation of manual or semi-automated processes; e.g., prior legislation, totaliza-tion agreements with foreign countries, and management information initiatives. Other initiatives awaiting availa-bility of ADP resources involve development of new applica-tions; e.g., computer audit trails or increased data exchanges with State and local entities to reduce over-payments.

In summary, the SSA prioritization plan during this period of crisis is:

   (1) maintenance of major operational systems;

   (2) new ADP initiatives that are essential for the con-tinuation of SSA operations, i.e., "survival projects;"

   (3) a commitment of resources to document and rewrite/ redesign existing antiquated systems; and

   (4) as resources permit, other initiatives prioritized by their projected cost-effectiveness.

3A. We also understand that there has been a major loss of computer programmers to private industry and other Federal agencies and that the hiring "freeze" and personnel classification problems are standing in the way of obtaining adequate staff and retaining them. We also understand that more qualified ADP personnel are reluctant to work for an organization which uses entirely outdated equipment. How serious is the situation?

RESPONSE

SSA does have a serious personnel retention problem in its Office of Systems. This has been compounded by SSA's inability to attract qualified college graduates. Over the past three years, the Office of Systems has experienced a steadily increasing attrition rate, particularly from its application programmer ranks. Many of the people who leave go on to programming jobs in private industry and other Federal agencies. Others leave for non-programming jobs within other SSA components because of promotions and other career advancement opportunities. One reason for leaving is that, as you mentioned, most of SSA's computerized applications do not represent "state-of-the-art" technologies, either in terms of methods or equipment.

In addition, often due to very restrictive implementation timeframes, systems software development is performed under intense pressures with extraordinary overtime demands. The emphasis is placed on creating operational programs, often at the expense of advanced systems development methods and frequently constrained by equipment limitations. This working atmosphere adds to attrition problems, particularly in the face of increasing recruitment pressures from other organizations.

A third factor relates to SSA's posture in recruiting new computer programmers. The personnel hiring "freeze" is only the latest in a series of such actions extending back to 1978. The impact of this has been to require more and more effort from fewer and fewer computer programmers, thereby exacerbating the pressures this group experiences and increasing attrition problems. I have approved new employment allocations for SSA which provide for significant staffing increases in the systems area. They are no longer under a freeze; therefore, hiring restrictions should no longer be a problem.

Another factor is increasing demand, nationally and locally, for programmers. Current salaries found in private industry are very attractive and are becoming difficult for SSA to match, particularly for expert senior programmers and recent computer science graduates.

3B. We understand that the new Budget provides for a major
increase in the number of positions in ADP systems but how
long will it take to recruit and/or train these individuals
to work on Social Security's old and unique hardware?

RESPONSE

The Administration is aware of this serious situation. Our
budget request recognizes the critical need to upgrade SSA's
systems capabilities in terms of staffing, equipment, and
software.

With respect to full-time permanent staffing in SSA's Office
of Systems, the budget provides for an increase from approx-
imately 1,900 positions on-duty to 2,600 positions on-duty
by the end of 1982. This increase will provide the flexi-
bility to recruit critically needed personnel such as
experienced programmers, systems analysts, hardware and
procurement specialists and computer scientists.

The time required to have individuals trained and fully
productive varies based on their backgrounds and the com-
plexity of their assignments. As discussed in the overview,
even experienced programmers cannot make significant contri-
butions to an undocumented, patchwork system without first
gaining extensive experience with the system. SSA assumes
it takes six to 18 months before an individual is trained
and productive. This assumes documented software. An
individual working with undocumented software may require
two years to gain personal knowlege of the undocumented
software through "hands-on" experience.

4. Most of the present proposals appear to be stop-gap measures necessary to prevent a systems breakdown. What is the status of long-term planning in the ADP area? Has Social Security's ability to accomplish this been affected by the 1979 reorganization which abolished the Office of Advanced Systems and provided a "functional organization?" What action was taken on the GAO recommendation in 1979 that "responsibility for comprehensive long-range planning should be clearly fixed within SSA's organizational structure?"

RESPONSE

The 1979 reorganization established a functional organization, consolidating most ADP systems activities within a single component. Shortly after the reorganization, GAO recommended that comprehensive long-range planning should be clearly fixed within SSA's organizational structure. The Agency concurred with this recommendation.

The responsibility for comprehensive long-range planning at SSA has been established with the Planning Support Staff, Office of Management Planning and Analysis, Office of Management, Budget and Personnel. Plans for all major agency initiatives are approved by the Executive Planning Committee (EPC) comprised of the Associate Commissioners from various operating components.

Long-range planning in the ADP area at SSA was institutionalized in August 1980 with the establishment of the SSA ADP Steering Committee. This Committee is the SSA executive-level body which reviews and approves the Agency's systems initiatives and allocates ADP resources consistent with overall Agency plans. The Committee met in September 1980 to review and approve the SSA User Systems Support Plan (USSP), which identifies and prioritizes user systems requirements. The Agency-approved USSP was the basis for the SSA ADP Strategic Systems Plan, which provides direction for systems activities and justification for SSA's ADP budget. Responsibility for user requirements planning has been established in the Office of User Requirements and Validation, Office of Operational Policy and Procedures. ADP planning activities are the responsibility of the Office of Systems Planning and Control, Office of Systems.

Both the USSP and the ADP Strategic Systems Plan for FY 1981-86 identified long-range goals and objectives, but emphasis during the past year has been on managing immediate critical workloads. Because of staff shortages, especially in critical areas supporting major acquisitions, saturated hardware, and new demands on available resources brought about by legislation, the ADP Steering Committee has had to focus on reallocating resources to solve immediate problems. Thus, long-range planning is not yet a viable function. Strengthening this area is a high priority of this Administration, and we are moving to improve our long-range planning function.

5. At the present time do you have a good idea how you would
    effect a major upgrade of SSA's computers and telecommuni-
    cations to achieve the most efficient operation possible?
    What is the cost to effect such an upgrade? What would you
    see as a schedule for accomplishing such an upgrade as
    quickly as possible? What savings in personnel positions
    (and related dollars) would such upgrade yield?

RESPONSE

Acquiring modern hardware is not the sole consideration in
upgrading our computer processes to assure maximum effi-
ciency. The primary solution to our problem is a combina-
tion of new systems design, new software and new storage
methods to make the system more efficient, standardized and
easier to maintain. With respect to a major upgrade of our
computers, for the last two years SSA has based its planning
on a partitioning strategy for the phased competitive
replacement of our data processing and telecommunications
equipment.

This partitioning strategy involves seven equipment replace-
ment initiatives addressing the following groupings of work-
loads and resources, which are termed partitions: (1) SSA
Data Acquisition and Response System (SSADARS), (2) Program
Development and Test Facility (PDTF), (3) Administrative,
Management Information and Statistical (AMIS) Workloads, (4)
Enumeration and Earnings Workloads, (5) Supplemental
Security Income and Retirement, Disability, and Survivors
Insurance Workloads, (6) Operations Control and Planning and
(7) Program Service Centers. Commissioner Svahn is not
convinced that this partitioning strategy is best suited to
SSA's most critical needs. Our severe problems in this area
may not allow us the time necessary to accomplish the
sequential improvement assumed in the partitioning strategy.

As one possible alternative for addressing these problems,
SSA is looking into the possibility of offloading some of its
less critical workload onto a commercial time-sharing
vendor's computer or to other government computer centers
that can handle additional workloads. SSA also is consider-
ing a proposal to consolidate in-house ADP workloads on nine
IBM 370/168 computer systems. This will require retaining
three government-owned IBM 370/168 computer systems acquired
to support SSA's movement of ADP processes and equipment to
the new computer center (NCC). This move is now underway and
scheduled for completion during the second quarter of fiscal
year 1983. If this proposal were adopted, it would result in
net savings of approximately $4.6 million through a reduction
of workyears by fiscal year 1983 and the release of ADP
equipment which is technologically and economically obsolete
(the IBM 360-65s).

The resolution of these two basic issues--relieving our
immediate, severe capacity problem and insuring that we have
the optimum strategy for upgrading both our hardware and
software in the long term--is one of the highest priorities
of the new Administration.

6. We understand that the so-called Partition Strategy was
designed at least in part to encourage competitive bidding
and get away from sole source bidding. Why is this approach
an effective method of enlarging capacity and improving
effectiveness or would some other approach be more effective?

RESPONSE

The partitioning strategy was devised to achieve the follow-
ing SSA objectives: (1) redesigning SSA software systems and
data files to comply with applicable Federal Information
Processing Standards (FIPS); (2) modifying SSA software sys-
tems and data files to permit machine transferability; (3)
performing competitive ADP/TC equipment procurements in com-
pliance with Federal Procurement Regulations (FPRs); (4)
expanding present computer capacity to accommodate workload
growth and future enhancements; and (5) achieving these
objectives in manageable segments that reduce staff impact
and operational risk to acceptable levels.

Although the partitioning strategy is designed to provide the
ADP/TC capacity SSA requires for effective workload support
by the end of 1989, SSA has needs of a more immediate nature
which require an increase in SSA's data processing capacity.
The Administration plans to reassess the partitioning
strategy to make certain that long term capacity and enhance-
ment needs can be accommodated and to assure that short and
intermediate term needs are met. As discussed previously,
short and intermediate term problems are extensive and are
overtaking SSA's ADP capabilities. However, this
Administration recognizes the situation and plans to initiate
those actions necessary to improve the situation.

7. In regard to the massive move to the New Computer Center, has any consideration been given to modernizing hardware and software systems? In private industry wouldn't such a relocation be accompanied by an upgrading of the equipment and systems to take advantage of changing technology?

RESPONSE

In private industry a relocation of ADP processes to a new facility would certainly be accompanied by needed upgrades in hardware and software. In fact, in private industry, the current state of SSA's data processing systems would be upgraded regardless of whether a move to a new computer site was planned. SSA's past planning has failed to address the growth in workloads and the need to expand and modernize its ADP capacity to accommodate these workloads in a timely manner.

The move to the New Computer Center is not the solution to SSA's ADP problems. It, in fact, exacerbates those problems because of the need to shuffle thousands of tapes weekly between the two facilities.

The solution to SSA's ADP problems entails a major redesign of its software, enlargement and enhancement of its ADP staff, elimination of the tape files and an increase in computer capacity.

To alleviate the immediate computer capacity problems, SSA is considering all available options, including procurement of additional computers, leasing of computer time from commercial sources or other government computer centers, and retention of three government-owned computer systems acquired to support the move to the New Computer Center. These actions are a less than adequate stop-gap response intended solely to provide this Administration adequate time to develop a comprehensive and long-range solution to SSA's computer capacity problems.

8. In the past there appear to have been substantial obstacles
   to Social Security getting approval for enlargement of its
   computer capacity. Could you outline them in some detail?
   Please describe the clearance procedure necessary to a major
   upgrade. Could you describe some of the attempts to enlarge
   capacity in recent years and what has happened to them? What
   can our subcommittee do to alleviate this problem?

   RESPONSE

   The Federal procurement process has a time-consuming approval
   chain and lengthy procedures which are followed before addi-
   tional computer resources can be acquired. A major procure-
   ment request undergoes numerous levels of review including:

   1. SSA review,

   2. DHHS Review of Request for Delegation of Procurement
      Authority,

   3. GSA Review of Request for Delegation of Procurement
      Authority.

   In addition, legislative committees, primarily House Govern-
   ment Operations, have been involved in this process to ensure
   compliance with procurement requirements.

   Because of this lengthy procurement process, over the past
   years SSA has had to seek relief from these requirements in
   order to acquire additional capacity needed to implement new,
   significant legislation. Moreover, even when time pressures
   have been less critical, SSA has not had the resources re-
   quired for the massive software conversion effort associated
   with the (potential) procurement of equipment not compatible
   with our current software. It has not even been clear that
   there are any significant cost advantages to doing so.

   Therefore, SSA has not pursued a totally competitive replace-
   ment of its computers. Consequently, the House Government
   Operations Committee, GAO and others became very critical of
   our ADP/TC systems design and procurement practices. In
   October 1978, Representative Brooks expressed concern about
   SSA's plans to implement the Future Process system redesign
   effort and to enhance SSADARS. He directed the GAO to initi-
   ate an extensive investigation of SSA's total systems devel-
   opment plans. The major concern focused on SSA's practice
   of expressing requirements in terms that limit competition
   to current suppliers or equipment which is compatible with
   our current equipment.

   The new Administration strongly believes in the desirability
   of open competition. We also recognize a critical need to
   upgrade SSA's systems capabilities substantially. It is one
   of our highest priorities. We must start to work on it now.
   Moreover, the Administration will consider reexamining the
   procurement process with an eye to streamlining it wherever
   possible.

· NINETY-SEVENTH CONGRESS
DAN ROSTENKOWSKI, ILL., CHAIRMAN

SM M. GIBBONS, FLA.   BARBER B. CONABLE, JR., N.Y.
J. PICKLE, TEX.   JOHN J. DUNCAN, TENN.
HARLES B. RANGEL, N.Y.   BILL ARCHER, TEX.
ILLIAM R. COTTER, CONN.   GUY VANDER JAGT, MICH.
ORTNEY H. (PETE) STARK, CALIF.   PHILIP M. CRANE, ILL.
MES R. JONES, OKLA.   BILL FRENZEL, MINN.
ANDY JACOBS, JR., IND.   JAMES G. MARTIN, N.C.
AROLD FORD, TENN.   L. A. (SKIP) BAFALIS, FLA.
EN HOLLAND, S.C.   RICHARD T. SCHULZE, PA.
ILLIAM M. BRODHEAD, MICH.   BILL GRADISON, OHIO
D JENKINS, GA.   JOHN H. ROUSSELOT, CALIF.
ICHARD A. GEPHARDT, MO.   W. HENSON MOORE, LA.
HOMAS J. DOWNEY, N.Y.
CECIL (CEC) HEFTEL, HAWAII
YCHE FOWLER, JR., GA.
ANK J. GUARINI, N.J.
MES M. SHANNON, MASS.
MARTY RUSSO, ILL.
AN J. PEASE, OHIO
KNT HANCE, TEX.
ROBERT T. MATSUI, CALIF.
ON BAILEY, PA.

JOHN J. SALMON, CHIEF COUNSEL
JOSEPH K. DOWLEY, ASSISTANT CHIEF COUNSEL
ROBERT J. LEONARD, CHIEF TAX COUNSEL
A. L. SINGLETON, MINORITY CHIEF OF STAFF

COMMITTEE ON WAYS AND MEANS

U.S. HOUSE OF REPRESENTATIVES

WASHINGTON, D.C.   20515

———

TELEPHONE (202) 225-3625

April 14, 1981

Honorable Richard S. Schweiker
Secretary
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C.   20201

Dear Mr. Secretary:

As you are aware, in our recent hearings on the President's budget
proposals, the last four former Commissioners of Social Security pointed
to ADP systems as the most difficult problem facing the social security
programs. Some persons believe that because of increasing demands upon
an antiquated system we could be close to a breakdown or at least a
"brown-out" of computer capacity. The Subcommittees on Oversight and
Social Security are attempting to understand the nature and seriousness
of the system crisis. In this regard we request answers to the following
questions.

We understand that there is a growing backlog of work for the
computer and it is increasing rapidly. We understand that a very substantial
amount of work that should be done by ADP is being done manually. We
understand the implementation of the Disability Amendments of 1980 and
Public Law 96-473 of last session are being delayed because of lack of
systems capacity. If we enact substantial amendments to the Social
Security Act this year, such as the President's minimum benefit provision,
wouldn't this result in further back-logs in the system? Would you give
us a detailed list of the deferred systems workload with some indications
of how priorities are established for its accomplishment?

We also understand that there has been a major loss of computer
programmers to private industry and other Federal agencies and that the
hiring "freeze" and personnel classification problems are standing in
the way of obtaining adequate staff and retaining them. We also understand
that more qualified ADP personnel are reluctant to work for an organization
which uses entirely outdated equipment. How serious is the situation?
We understand that the new Budget provides for a major increase in the
number of positions in ADP systems but how long will it take to recruit
and/or train these individuals to work on social security's old and
unique hardware?

Most of the present proposals appear to be stop-gap measures necessary to prevent a systems breakdown. What is the status of long-term planning in the ADP area? Has social security's ability to accomplish this been affected by the 1979 reorganization which abolished the Office of Advanced Systems and provided a "functional organization?" What action was taken on the GAO recommendation in 1979 that "responsibility for comprehensive long-range planning should be clearly fixed within SSA's organizational structure?"

At the present time do you have a good idea how you would effect a major upgrade of SSA's computers and telecommunications to achieve the most efficient operation possible? What is the cost to effect such an upgrade? What would you see as a schedule for accomplishing such upgrade as quickly as possible? What savings in personnel positions (and related dollars) would such upgrade yield?

We understand that the so-called Partition Strategy was designed at least in part to encourage competitive bidding and get away from sole source bidding. Why is this approach an effective method of enlarging capacity and improving effectiveness or would some other approach be more effective?

In regard to the massive move to the New Computer Center, has any consideration been given to modernizing hardware and software systems? In private industry wouldn't such a relocation be accompanied by an upgrading of the equipment and systems to take advantage of changing technology?

In the past there appear to have been substantial obstacles to social security in getting approval for enlargement of its computer capacity. Could you outline them in some detail? Please describe the clearance procedure necessary to a major upgrade. Could you describe some of the attempts to enlarge capacity in recent years and what has happened to them? What can our subcommittees do to alleviate this problem?

Sincerely,

J. J. Pickle, Chairman
Social Security Subcommittee

Charles B. Rangel, Chairman
Subcommittee on Oversight

JJP/CBR/ah

cc: Mr. Jack Svahn
Commissioner Designate
Social Security Administration
Department of Health and Human Services
Washington, D.C. 20201

THE COMMISSIONER OF SOCIAL SECURITY

BALTIMORE, MARYLAND 21235
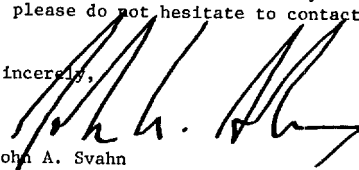
August 21, 1981

The Honorable J. J. Pickle
Chairman, Subcommittee on Social Security
Committee on Ways and Means
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Per your request of June 30, 1981, enclosed are my responses to
your questions relative to the Social Security Administration's
automatic data processing issues. As you can see from my responses,
we are still in a crisis situation. Although I have made
revitalizing SSA's ADP environment one of my highest priorities,
inadequate hardware, archaic software, and a lack of technical ADP
personnel cannot be quickly remedied.

I hope these responses satisfy your concerns. My staff and I are
prepared to provide you with additional information as necessary.
If I can be of further assistance, please do not hesitate to contact
me.

Sincerely,

John A. Svahn

Enclosure

1. You have informed us of difficulties in hiring and retaining competent
   ADP personnel due to rigid job classifications and high salaries in
   private industry.

   What have been the results of your recent hiring efforts for ADP
   personnel? What actions have you taken to enlist the aid of the Office
   of Personnel Management in solving the ADP personnel problems?

   ANSWER

   As a result of our recent recruitment efforts, we have been able to hire

   only 85 individuals into full-time technical ADP positions. Moreover,

   60 of the 85 individuals were recruited from within SSA and have no

   prior ADP training. We estimate that it will take 12 to 18 months

   before those internal recruits become trained and productive. To

   strengthen immediately our nontechnical ADP staffing levels, we have had

   to recruit 90 part-time employees from local colleges as Peripheral

   Equipment Operators. These individuals are necessary to assist in the

   relocation of system operations to the New Computer Center.

   Although, to date, we have not been able to significantly increase our

   ADP staffing levels, our recruitment efforts are continuing. Recruit-

   ment of technical ADP personnel is not a quick process. To expedite

   this process, the Office of Personnel Management (OPM) has granted SSA

   authority for the direct hiring and testing of technical ADP personnel.

   In addition, OPM has granted SSA authority to approve "superior

   qualification appointments." This authority permits SSA, without prior

   approval from OPM, to pay recruits with unusually high or unique

   qualifications more than the normal journeyman rate. Finally, OPM has

   assisted SSA in submitting its ADP vacancies to the Federal Employees

46

Re-Employment Registry. (Operated by the Department of Labor in cooperation with OPM, this job matching service provides information about available Federal positions to Government employees undergoing a Reduction-in-Force.)

We are continuing our aggressive recruitment effort, but judging from the results thus far, it appears that it will take at least one year before SSA will be able to recruit the technical ADP personnel we need and at least an additional six months to one year, beyond that, before these recruits will be fully productive.

2. In the mid-1970's the General Accounting Office (GAO) maintained that some of your computers were significantly underused and then questioned the Social Security Administration's (SSA) plan for acquiring and installing four large-scale computers during fiscal years 1977 and 1978. SSA subsequently acknowledged that the acquisition plan was obsolete and suspended further efforts to acquire large-scale systems. In lieu of this, SSA hired consultants to study agency computer usage so that actual computer needs could be determined.

What do these consultant's reports show as to SSA computer needs?

ANSWER

A contract for ADP consultant services was awarded to the MITRE

Corporation shortly after release of the GAO report. The MITRE

Corporation was tasked with outlining the utilization patterns and

practices in SSA's ADP environment and recommending improvements. The

MITRE Corporation made a number of recommendations. Some of the most

important recommendations addressed SSA's software development process

and the need for SSA to become less dependent on magnetic tapes. With

respect to SSA's computer needs, MITRE concluded that by procuring four

IBM 370/168 systems SSA could afford to release two additional

antiquated IBM 360/65's. SSA had released four of the antiquated IBM

360/65 systems when it initially procured the IBM 370/168 systems.

Although useful when issued in the mid-1970's, GAO's and MITRE's

assessment of SSA computer capacity has very little relevancy to SSA's

current capacity shortfall. SSA's computer capacity shortfall is now

estimated at 20,000 hours and growing. Our ability to maintain current

operations, even at their curtailed levels, continues to be tenuous.

3. The GAO in numerous reports has stated that better controls--both manual and automated--are needed to prevent program abuse and malicious acts of violence. How good is security at the present time and how vulnerable is the system to sabotage?

ANSWER

Physical security measures at the present computer facility include 24-hour protection by GSA Federal Protective Officers (FPO's), electronic access controls at all entry/exit points, as well as intrusion alarms. These measures provide a high level of protection from unauthorized access. They do not offer protection against acts of sabotage by employees with authorized access.

At the New Computer Center, physical security measures will be enhanced. All electronically controlled entry/exit points, intrusion alarms, and closed circuit television monitoring systems will be integrated into a single computerized security system. This computerized system will be monitored around the clock by FPO's. The entire New Computer Center is under 24-hour guard.

Physical security of the central computer complex is only one aspect of security. Access to SSA's Data Acquisition and Response System (SSADARS) teleprocessing network must also be controlled. To control unauthorized access, terminals are limited to specific functions, (e.g., a query terminal cannot trigger payment), and are capable of being locked when not in use. A password is required to unlock a locked terminal.

Past instances of program misuse, however, have not occurred typically
as a result of unauthorized access. Rather, in most instances, an
appropriately authorized individual has initiated an unauthorized act.
To guard against this potential problem, SSA has proposed that Personal
Identifier Numbers (PIN's) be associated with all critical transactions
to provide required audit trails. At present, however, computer
capacity does not permit PIN's to be used for other than the most highly
sensitive transactions, e.g., Immediate Payment in Critical Case
(IMPACC) transactions. Accordingly, until SSA's computer capacity is
substantially increased, most SSA systems will remain vulnerable to
unauthorized acts by authorized personnel.

4. We understand that you are experiencing considerable delays in the full utilization of your New Computer Center.

    a) How much of your system do you now have in place in the new center?

    b) When do you plan on completing the move of hardware, memories and software?

    c) How far off is this from the original plans?

ANSWER

We have four (4) IBM 370/168 computers and supporting peripheral equipment in place in the New Computer Center (NCC). Although three of these computers were acquired to facilitate the move to the NCC, we have asked GSA for authority to retain these "bridge" systems to help alleviate our hardware maintenance problems and the shortage of operating personnel we experience from operating many small computers. We also have been able to successfully move a significant amount of the communications equipment supporting our Test and Time Sharing Facility (TTSF) and our SSADARS network, (e.g., the complete Baltimore SSADARS concentrator and the SSADARS test and maintenance concentrators).

The most critical portion of the move is maintaining two operational sites and transferring live computer data and programs. The computer programs and data will not be relocated to the New Computer Center until we have established a risk free operation on the computer equipment resident in the NCC. Relocation of all the remaining hardware to the New Computer Center is less critical since our bridging strategy greatly reduces the risk of the hardware moves. The more antiquated equipment,

e.g., the IBM 360/65's, may not be able to physically withstand the
rigors of the move to the New Computer Center. Due to the high risk of
moving the 360/65's, we have not planned for the move of these older
computers.

Due to construction problems with the New Computer Center, we are
approximately 1 year behind our original schedule. We anticipate the
move to be complete by January 1983.

However, during the entire period of the move, we will be required to
maintain two computer centers, move tapes back and forth and staff both
operations, all of which will add to our current operating difficulties.

5. We understand that you anticipate disruptions in the computer services
   when you make these conversions and possible loss of essential data.

   a) Could you tell us what risks you are encountering?

   b) What precautions can you take to ensure that these risks
      are minimized?

ANSWER

There are primarily two major areas of risk associated with the move.

First, moving data, i.e., magnetic tapes, between buildings during this

period of transition greatly magnifies the chance of tapes being lost or

damaged. Second, the chance of hardware and software breakdowns at the

New Computer Center are increased due to the difficulties in ensuring

that the new system is absolutely compatible with the old system. A

slight variance in the hardware or software controlling the computer,

i.e., the operating system, can cause computer programs to operate

differently or not operate at all.

To address the dangers inherent in moving magnetic tapes among

buildings, strict controls on all tape flow between buildings has been

instituted. Moreover, environmentally controlled transportation has

been arranged to minimize the potential danger of tape damage due to

exposure to the elements.

The potential problem of incompatible systems has been addressed by extensive acceptance testing and careful validation of production runs performed at the New Computer Center. The extent of acceptance testing has been minimized to some degree, however, due to the pressure to increase computer capacity as quickly as possible. The risks associated with operating with insufficient computer capacity, e.g., late processing of important production runs, in some respects exceed the risk associated with operating with minimally tested systems.

6. Over the years there have been several major systems strategies--the
so-called Future System in 1976, the RSDHI Redesign in 1978, and more
recently the User Systems Support Plan--all large-scale, all
comprehensive, all pretty much the same in their objectives.

How does the current User System Support Plan differ from the earlier
plan?

Could we please have a copy of the User System Support Plan?

ANSWER

The Future System Process was established in 1976 for the purpose of

developing the best possible ADP systems for SSA using advanced computer

technology. This effort simultaneously addressed total SSA process

redesign and ADP systems replacement. Since the Future System effort

was not progressing well during the 1979 reorganization of SSA, this

approach to long-range ADP planning was redirected.

In addition to the total process redesign, there was another software

redesign effort known as the RSDHI Redesign underway. Unfortunately,

the redesign software developed from this effort, while easier to

maintain, required more computer capacity to operate. Since the RSDHI

Redesign did not embody a commensurate hardware acquisition effort, only

part of this redesign was implemented because of hardware capacity

limitations.

To fill the void created with the redirection of the Future System
Process, SSA instituted an SSA ADP Steering Committee in August 1980.
The two main products of the Steering Committee are the User Systems
Support Plan, which identifies and prioritizes user systems
requirements, and the SSA ADP Strategic Systems Plan, which provides
justification for SSA's ADP budget. Neither of these documents provide
the long-range ADP planning necessary to salvage SSA from its critical
ADP problems. In fact, the severity of SSA's ADP problems have largely
reduced the focus of this ADP planning activity to short-range, crisis
management issues.

The most recent USSP and ADP Strategic System Plan is for the planning
period FY 1981-1986 and was prepared before my being named Commissioner.
As indicated in my testimony, I am reassessing all current plans and am
working toward developing an ADP plan that will provide relief for SSA's
ADP crisis as quickly as possible. Given the current state of
long-range ADP planning in SSA, development of a comprehensive ADP plan
in a short time frame is a very challenging undertaking.

7. We understand that you have signed a contract with Paradyne Corporation for a new SSADARS network. We are told that this new network will increase the number of available terminals, will eliminate the old teletype or ARS system and will have a new "intelligence" or programming capacity.

   a) What is the cost of that new network, and what is the life of the contract?

   b) How does the cost compare to the current network costs?

   c) Will the increase in terminals increase the traffic and workloads in the network?

   d) Will the so-called "intelligent" terminals require programming? If so, what resources do you have to do this?

   e) What is your implementation schedule for the new network?

   f) How long will it take to make the programmable function of these terminals operational?

   g) What uses do you expect to make of the capability--the programming of individual terminals?

ANSWER

Actually, SSA has not procured a new telecommunications network.

Rather, we have purchased replacement terminals and modems for our

existing networks.

a) The estimated cost of the telecommunications equipment through

   FY 1989 is $125 million. This figure includes developmental costs,

   as well as the cost of the new terminals and new modems. The

   contract with Paradyne is for 8 years, i.e., March 1981 -

   March 1989.

b) The current network consists of two independent systems-- the SSA
    Data Acquisition and Response System (SSADARS) provided by General
    Telephone and Electronics Information Systems and the Advanced
    Record System (ARS) provided by Western Union. The two systems are
    being merged as a "new" SSADARS network. Consolidation of these
    systems will save approximately $82 million through FY 1989.

c) The new terminal contract is a one-for-one replacement of existing
    ARS and SSADARS terminals. There is no overall increase in the
    numbers of terminals. However, since all traffic will now be on one
    system, SSADARS, the total traffic and number of terminals on the
    SSADARS network will increase. This increase in SSADARS traffic
    will further exacerbate SSA's computer capacity shortfall.

d) The purchase of "intelligence" for these terminals is an option
    available to SSA under the contract. As intelligent terminals, the
    new terminals could be programmed. There are, however, no resources
    available to undertake this programming.

e) Telephone circuits, modems and terminals are already being installed
    in SSA field offices. The current plans call for the last of the
    terminals to be replaced in early 1983.

f) As noted previously, the purchase of "intelligence" for these
    terminals is an option available to SSA under the existing contract.
    The intelligence capacity of these terminals could be operational
    18 months to 2 years after the option is exercised, if SSA had
    sufficient software development resources.

g) Specific uses of local intelligence have not yet been identified.

8. It is reported that to process the 1981 cost-of-living benefit increase
    timely and correctly you had to finish a rewrite of your Master
    Beneficiary Record (MBR) in March and that as of late April this had not
    been completed.

    a) Has the MBR rewrite been completed and validated now?

    b) Do you anticipate a significant number of cases which can't be done
        by the automated system?

    c) How many cases?

    d) How does this compare with your past experience--are there more or
        less cases requiring manual operations?

    e) Will any beneficiaries have their increases delayed?

    f) Will you have to defer any workloads in order to get the Benefit
        Rate Increase (BRI) processed.

    ANSWER

    a) Both the MBR rewrite and the 1981 BRI have been completed,

        validated, and implemented.

    b) The 1981 BRI, as in past years, "alerted" MBR accounts for manual

        post review. The results of the post review indicated that the

        automated system did properly increase individual monthly benefit

        amounts.

    c) A total of 406,655 MBR accounts were alerted for post review (1.3

        percent of the total records processed).

    d) Approximately 144,000 fewer alerts were generated in this year's BRI

        operation, as compared to 1980.

e) No.

f) In order to provide adequate computer time to do the MBR rewrite and
to process the BRI, it was necessary to suspend and delay a large
number of ongoing computer operations, such as the processing of
annual reports related to the Retirement Test, the Automatic Earning
Reappraisal Operations (AERO) and post entitlement actions. We
are in the process of catching up but those deferrals have
exacerbated our capacity shortfall problems.

c) 240,000 dual-entitlement cases

d) Software exists to process practically all recomputations
(dual-entitlement cases remain a problem), however, computer
capacity does not exist to undertake this operation.

e) Yes. Backlogs will remain as long as computer capacity is
insufficient. Higher priority workloads, e.g., processing of
initial awards, must be scheduled before recomputations.

9. We understand that the Automatic Earnings Recomputation Operation (AERO) for 1978 and 1979 has significant delays. Previously this operation was performed within 6 to 9 months after the end of the year. But since 1978 you have had a lag of 12 to 16 months.

a) How did this occur?

b) We understand that as a result of this lag there were higher than normal complaints and that you processed more requests for manual recomputations than normal. Can you tell us how the numbers of manual recomputations compared in this period over previous years?

c) We understand that you are continuing to experience problems with the recomputation of dual-entitlement cases. What is your current backlog on such cases?

d) Is the recomputation fully automated now?

e) Do you anticipate the same sort of lags and backlogs in the future?

ANSWER

a) Delays in processing the Automatic Earnings Reappraisal Operation are attributable primarily to two factors. One, SSA has experienced significant delays in processing annual reports of wages by employers. And two, we simply don't have the computer capacity to process the earnings recomputation timely. (The MBR Rewrite and Benefit Rate Increase processing were a higher priority.)

b) We are not sure how many more of the 1979 recomputations will have to be processed manually. Our approach has been to defer processing rather than institute a massive manual operation. If sufficient computer capacity is not available, manual recomputations could be increased significantly.

10. We understand that the so-called earnings enforcement operations--
    whereby annual reports are compared to actual earnings--has not yet been
    processed for 1978 or 1979. In the past, such operations were done
    between 6 to 9 months after the end of the reporting year.

    a) How did this delay occur?

    b) What effect will this have on beneficiaries?

    c) When do you expect to complete these operations?

    d) If you release all these cases at once--1978, 1979 and even 1980--
        how much workload will result?

    e) Do you have sufficient staff to meet those workloads and maintain
        your normal operations?

    ANSWER

    a) Software to perform the earnings enforcement operation required a

        redesign to continue processing. This software development had to

        compete with development of ADP applications for new legislative

        initiatives, (e.g., the 1980 Amendments), as well as other high

        priority workloads, (e.g., the Benefit Rate Increase). Moreover,

        once the software development was complete, we did not have

        sufficient equipment to establish the required on-line data base.

        This operation, of course, must also compete with all other systems

        for the very scarce computer time on SSA's production computers.

    b) Those beneficiaries who have been incorrectly paid in prior years

        will continue not to have their benefits adjusted. The issuance of

        underpaid benefits, as well as recovery actions on overpayments,

        will be delayed.

c) Barring any unusually severe "brown outs" of computer capacity, ADP
    processing of enforcement operations based on 1978 earnings could be
    completed this month. ADP processing of enforcement operations
    based on 1979 earnings cannot be completed before the end of the
    calendar year. Reliable estimates for enforcement operations based
    on 1980 earnings are not possible at this time, since we are still
    struggling with the postings of these wage reports from employers.

d) While specific data are not available, we estimate that each of
    these enforcement operations will involve about 350,000 cases.
    Limitations of our hardware capacity preclude us from processing
    these cases all at once. The best that we can hope to manage in the
    current ADP environment is to intersperse segments of this operation
    throughout our annual ADP schedule to minimize impact on other
    production operations.

e) Since hardware limitations require that processing of this workload
    be performed in segments, adequate non-ADP staff should be available
    through the use of overtime and revised priorities to handle the
    flow of edits and exceptions that will result.

11. We understand that you are experiencing problems with your postentitlement system and that much of the blame falls on the so-called Automated Job Stream System (AJS) which was part of the overall RSDHI Redesign strategy.

a) What is AJS?

b) In general what is wrong with it?

c) We are told that AJS is being implemented in phases. Would you identify those phases and describe their current status?

d) Can you fall back on your old systems until the quirks with AJS can be worked out?

ANSWER

a) The Automated Job Stream is the automated system for processing annual reports, work notices and benefit recomputations based on additional earnings.

b) There is nothing, per se, wrong with the AJS. The major problem is that there is a lack of adequate computer facilities required to run the AJS (or SSA's other postentitlement systems). The AJS program was designed in a way that reduces the amount of scarce programmer effort needed to maintain it, but increases the amount of equipment capacity needed for regular operation. Because of the severe continuing shortage of computer capacity, the AJS has had a continuing scheduling problem. This problem continues to adversely affect both further software development in the AJS and timely processing of operational workloads. Inadequate computer capacity causes processing delays even when AJS is not scheduled to run.

c) Because of the shortage of ADP personnel and computer capacity, minimum software development efforts are being directed at continuing the implementation of the AJS. There were four phases of the AJS planned: They are:

-the AJS version to process benefit recomputations because of additional earnings and to apply benefit increases based on months in which benefits were not payable due to work (AJS-1).

-the AJS version to process initial and subsequent award actions (AJS-2).

-the AJS version to process annual reports and work notices (AJS-3).

-the AJS version to process non-automated cases encountered in the benefit rate increase (AJS-5).

AJS-1 and AJS-3 are operational and run when computer capacity permits. AJS-2 and AJS-5 are not operational. Development work on AJS-2 and AJS-5 have been delayed due to hardware resource constraints and higher priority software development projects.

d) No. There is no systems alternative for any of the functions of AJS. The former processes which supported these functions were archaic and were obsoleted in 1978 (AJS-1) and 1979 (AJS-3). There is no recognizable need and no software development capacity to develop a fallback for the AJS. AJS-5 was a developmental project that had no functional predecessor.

12. We understand that the Claims Automated Processing System—so-called CAPS—is experiencing serious systems problems of its own. We are informed that the number of cases which are excluded from the system has dramatically increased and that benefits have been miscomputed. What are the statistics in this area? Have you increased staff to meet the manual workload which has resulted?

ANSWER

The major problem has been the inability of the Awards Processing

Operation to compute the disability maximum benefit rate, i.e., the

disability cap. This has caused manual processing of approximately

1,000 cases a month.

We have diverted staff and increased overtime to handle this workload.

This has caused increased backlogs of some other lower priority

workloads. The shifting of potential automated workloads to manual

processing is widespread among SSA workloads and is necessary if SSA is

to continue processing with its current ADP resources.

13. The MADCAP system, we are told, is your so-called manual job stream. It is designed to handle claims and some postentitlement events that can't be handled by automation. Is its workload increasing? Give us the latest statistics.

ANSWER

Although there are fluctuations month to month, manual workload processing has increased. In 1979, 7.48 million transactions were processed through MADCAP. In 1980, 7.56 million transactions were input through our manual payment system. Based on the rate for the first 5 months of 1981, we expect in excess of 8.2 million manual actions. Pending legislative initiatives, however, could increase this workload precipitously.

14. We understand that you are considering a move to contracting out to
help resolve your current problems.

a) Do you intend to use more contractors, that is, leased computer
time, in order to expand your data base?

b) Can you identify how much computer time you lease right now and who
you lease it from?

c) Does SSA provide any of its own computer time to other public sector
or private sector organizations?

d) How much of your computer time is so provided?

e) Has there been any significant increase or decrease in this time
over the last few years?

ANSWER

a) The additional computer capacity will not be used to expand SSA's

data bases. The capacity is needed to get critical operational work

completed and to stop the continuing growth of backlogs. Very

simply, we have more mandatory operational work than we have

computer capacity. We are falling further behind in our processing

and need the additional capacity to maintain the minimum level of

ADP operations.

b) We are presently leasing approximately $4.5 million worth of

computer services through the General Services Administration's

teleprocessing services program. Our major contracts are with

Computer Sciences Corporation, Datacrown, and American Management

Systems. It should be noted that those contracts are used for

processing administrative, management and statistical data and not

programmatic processing requirements.

c) SSA continues to process title XVIII workloads that are tightly
   integrated with our regular title II processing. There are also, on
   occasion, requests from HHS or GAO auditors for ADP services in
   support of an audit. However, there are no significant amounts of
   SSA computer time being provided to other public or private sector
   organizations. SSA is and has been for a number of years a buyer of
   computer time, not a seller.

d) My response to question c) is applicable here.

15. Is it true that the Social Security Administration failed to program
the limit on family maximum benefits required by the 1977 Amendments?

a) If so, have you fully corrected this problem now?

ANSWER

All systems software modifications necessary to limit family maximum

benefits as required by the 1977 Amendments were implemented in January

of 1979. After implementation, however, a programming error was

detected that caused the maximum to be incorrectly computed in certain

complex situations. The error was corrected in December 1979.

16. In your response to our earlier letter, you indicated that after the maintenance of the major operational systems, your next priority is new ADP initiatives that are essential for the continuation of SSA operations—including judicial and legislative mandates. Please provide a status report on the automation of the 1980 Amendments including a discussion of the problems you are encountering with each provision.

We understand that the SSI offset provision of the 1980 Amendments is particularly difficult to implement. Are the administrative difficulties involving the pending legislative proposals being adequately communicated both to the upper levels of the executive branch and the legislative branch? What mechanism has been developed to communicate those difficulties?

ANSWER

The problems encountered automating the provisions of the 1980

Amendments are not unique to the provisions. SSA does not have

sufficient computer resources to permit adequate computer time for

software development and testing and is critically short of trained ADP

personnel. Moreover, implementation of the Amendment provisions, as

with other software development projects, is particularly difficult

because of the archaic state of SSA's existing software.

The following provisions of the 1980 Amendments, however, have been

fully automated:

| | Fully Automated |
Provision	Subject
101	Limit on family maximums
102	Reduction in dropout years
103	Elimination of second Medicare waiting period
201	Substantial gainful activity (individual)
203	Termination of income at age 18

Provision	Subject
301	Termination of benefits for person in vocational rehabilitation programs
303	Extension of the trial work period (individuals)
304	Preeffectuation review
305	Notices

We have just now, August 1981, been able to partially automate Section 501 permitting offset of SSI payments against Title II benefits. We do not expect full automation of this provision, i.e., the Windfall provision, to be accomplished until some time in calendar year 1983.

The provisions of the 1980 Amendments remaining to be automated are listed below. We are hopeful that automation of these provisions can be accomplished by January 1982.

Pending Automation

Provision	Subject
201	Substantial Gainful Activity (couples)
302	Treatment of extraordinary Work Expenses
303	Extension of Trial Work Period (couples)
311	Periodic review of disability determinations
504	Aliens receiving SSI

With respect to advising upper levels as to SSA's ability to automate
pending legislation, the process is ongoing. SSA analyzes all pending
legislation and sends forward bill reports and other analyses
addressing both the programmatic and administrative impact of the
proposed legislation. SSA does not have the capacity to automate much
of the legislation being proposed. The limitations of our ADP
environment--both hardware and software--have been communicated, as
have alternative manual methods and costs for implementing proposed
legislative initiatives.

17. In your response of May 28 to our earlier set of questions concerning
SSA's systems, there is little or no mention of the Office of
Management and Budget (OMB). Specifically, in your answer to our
question concerning past obstacles to gaining approval for enlargement
of computer capacity, there is no mention of OMB. Does this mean that
OMB has no review or approval role in procurement of SSA's ADP
equipment or in other changes proposed for SSA's systems by SSA or HHS?
Could you explain more clearly what OMB's role in the future will be in
connection with planned improvements in SSA's systems?

ANSWER

The Office of Management and Budget (OMB) plays no different role with

respect to SSA systems than it does with any other agency or SSA

program. In the past, OMB has been justifiably critical of SSA's

planning and management of systems. They are currently fully

supportive of our efforts as demonstrated by the increase in money and

staffing in the Administration's 1982 budget. Beyond OMB's ongoing

responsibilities with respect to the budget, OMB issues various guides

and circulars pertaining to the procurement process that are applicable

to all agencies. Compliance with OMB budgetary and management

requirements presents no unique problems to SSA.

O